

# **EM&A** Report

# **EcoPark Operation**Quarterly EM&A Compliance Report

**February to April 2012** 









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#### **EXECUTIVE SUMMARY**

#### General

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.

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 Joint Venture (SGJV) by EPD in November 2006.

SGJV ("the Operator") appointed SMEC Asia Ltd (SMEC) as the Environmental Team (ET) for the Environmental Monitoring and Audit (EM&A) works. Atkins China Ltd (Atkins) are the Independent Environmental Checker (IEC) for the EM&A works. The ET and the IEC carry out the EM&A works for the operation of EcoPark as required by the EM&A Manual and in accordance with the conditions of the Environmental Permit.

This is the twentieth (20<sup>th</sup>) quarterly EM&A report prepared for the operation phase of EcoPark and covers February 2012 to April 2012.

The tenants' recycling activities are audited on a monthly basis and the results are summarised in this report. In the reporting quarter, there were eight tenants in Ecopark Phase 1 and Phase 2:

#### 1. Phase 1

- Champway Technology Limited (Champway) waste cooking oil;
- Shiu Wing Steel Limited (Shiu Wing) waste metals;
- Hong Kong Hung Wai Wooden Board Company (Hung Wai) waste wood;
- Li Tong Group (Li Tong) Waste Electrical and Electronic Equipment (WEEE);
- Hong Kong Telford Envirotech Group Limited (Telford) waste plastics; and
- Cosmos Star Holdings Co., Limited (Cosmos) waste lead-acid batteries.

#### 2. Phase 2

- YOT EcoPark Plastic Resources Recycling Centre (Yan Oi Tong) waste plastics; and
- St. James' Settlement "WEEE GO GREEN" EcoPark (St James' Settlement) WEEE.

It should be noted that Cosmos have yet to commence recycling operations. It should also be noted that Hung Wai did not carry out any recycling during the reporting quarter.

The first batch of Phase 2 lots of was awarded to new tenants in August 2011.

In this reporting quarter, site inspections were conducted by the ET whilst quarterly joint site inspections were carried out by the Operator, the IEC and the ET. Observations and recommendations were made during site inspections.



#### **Throughput of Materials / Waste Generated**

The throughputs of the reporting quarter are summarized below. Please note that product output plus waste disposal does not necessarily equal the waste input, due to material losses during processing and material retained within the lot.

Tenant	Waste Materials	Waste Input (tonnes)	Product Output (tonnes)	Product Output (pieces)	Waste Disposal (tonnes)
Champway [Note 1]	Waste Oil	2,380	561	-	1,250
Hung Wai	Waste Wood	-	-	-	-
Li Tong	WEEE	140	93	-	-
Shiu Wing	Waste Metals	12,017	12,017	-	-
Telford	Waste Plastic	100	_ [Note 3]	-	-
Yan Oi Tong	Waste Plastic	374	336	-	45
St James' Settlement	WEEE	71	45	1,398	6

#### Notes:

- 1. Output includes biodiesel and glycerine.
- 2. The plant operation has been suspended and stopped receiving wood since October 2011.
- The trace quantity of output produced by Telford is considered negligible and the throughput data is available up to February 2012.

#### **Exceedances of any Measured Action / Limit Levels**

The northern part of EcoPark is located within the 250m Landfill Gas (LFG) Consultation Zone of Shiu Lang Shui Landfill. LFG monitoring during this quarter was undertaken on 19 April 2012 at five locations (three in Phase 1 and two in Phase 2). No exceedance of Action/Limit Level was recorded.

# **Summary of Complaints, Summons and Prosecutions**

Numbers of complaints, summons and successful prosecutions are summarised below:

Complaints: Zero;

Summons: Zero; and

Successful Prosecutions: Zero.

# **Reporting Changes**

There is no change in reporting in this quarter.

# **Future Key Issues**

No key issues are anticipated in the next reporting quarter, Operation phase LFG monitoring for Phase 1 and Phase 2 will continue to be carried out by the ET, although no exceedances are anticipated.



#### 1 PROJECT DESCRIPTION

#### 1.1 Overview

- 1.1.1 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 realise the full potential of the local recycling industry and alleviate the heavy reliance on the export of recyclable materials recovered from Hong Kong.
- 1.1.2 EcoPark has been developed in Tuen Mun Area 38 (see *Figure 1-1*) in two phases (Phase 1 and Phase 2) under construction contract *EP/SP/52/06 Development of EcoPark in Tuen Mun Area 38*, which was awarded to Kaden Construction Ltd by the Environmental Protection Department (EPD) in June 2006. Phase 1 construction was completed in July 2009 and Phase 2 construction was completed in November 2010. 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 Joint Venture (SGJV) by EPD in November 2006.
- 1.1.3 SGJV ("the Operator") appointed SMEC Asia Ltd (SMEC) as the Environmental Team (ET) for the Environmental Monitoring and Audit (EM&A) works. Atkins China Ltd (Atkins) (IEC) has been appointed to provide the Independent Environmental Checker (IEC). The ET and the IEC carry out the EM&A works for EcoPark as required by the EM&A Manual and in accordance with the conditions of the Environmental Permit (EP).

#### 1.2 Operation Programme

- 1.2.1 By end-April 2012, there were a total of 14 tenants in EcoPark comprising:
  - Seven tenants (Champway, Shiu Wing, Hung Wai, Li Tong, Telford, Yan Oi Tong (YOT) and St. James' Settlement) who continue to carry out full recycling operations;
  - One tenant (Cosmos) who is carrying out construction works for factory building; and
  - Five new tenants (K. Wah, E. Tech, On Fat Lung, Chung Yue and SSK) awarded leases for lots in Phase 2 of EcoPark in August 2011 and they are currently carrying out plant design and construction planning.
- 1.2.2 On 13 April 2012, an open tender for a lot of Phase 2 with an area of 8,500m<sup>2</sup> to be assigned for waste recycling business was invited. The closing date of the tender is at 12:00pm on 25 May 2012.

# 1.3 EM&A Organisation

1.3.1 The EM&A works are carried out by the ET and the EM&A works are verified by the IEC. The key personnel contact details are summarised in *Table 1-1*.



**Table 1-1 EM&A Personnel Contact Details** 

Position	Name	Email Address	Telephone No.		
Project Proponen	Project Proponent – EPD				
Principal EPO	Dr Lawrence WONG	lawrwong@epd.gov.hk	2872 1700		
Operator – SGJV					
Project Manager	Noel AU	nkfau@ecopark-mgnt.com	2496 7633		
Park Manager	Morgan CHIU	morganchiu@ecopark-mgnt.com	2212 5910		
IEC – Atkins					
IEC	Sharifah OR	sharifah.or@atkinsglobal.com	2972 1802		
IEC Site Inspector	Keith CHAU	keith.chau@atkinsglobal.com	2972 1721		
ET – SMEC					
ET Leader	Antony WONG	antony.wong@smec.com	3995 8120		
ET Site Inspector	Winnie MA	winnie.ma@smec.com	3995 8138		

The organisation of SGJV is shown in *Figure 1-2* and the current EM&A organisation is illustrated in *Figure 1-3*.



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



Source: EPD Records (May 2012)



Figure 1-2 Organisation Chart of SGJV

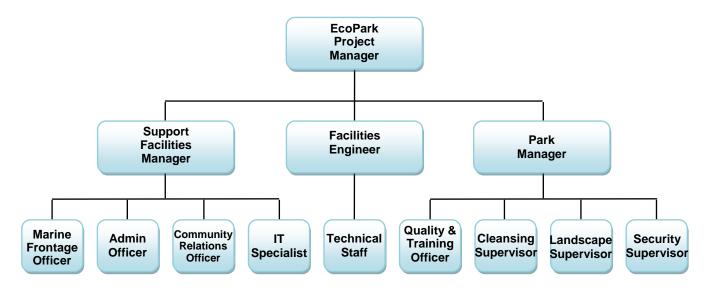
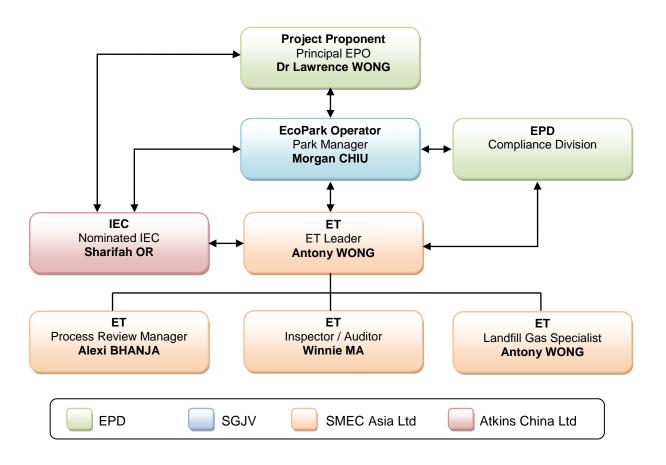


Figure 1-3 Organisation Chart of EM&A Works (Operation)





#### 2 SUMMARY OF EM&A REQUIREMENTS

#### 2.1 Monitoring Parameters

- 2.1.1 Landfill Gas (LFG) is required to be monitored quarterly at service voids and LFG vents within EcoPark because the northern part of EcoPark lies within the 250m LFG Consultation Zone for Siu Lang Shui Landfill, which is located to the north of EcoPark.
- 2.1.2 LFG monitoring has been carried out at Phase 1 and Phase 2 of EcoPark since the quarter August to October 2009 and the quarter November 2010 to January 2011, respectively, after completion of Phase 1 construction in July 2009 and completion of Phase 2 construction in November 2010.
- 2.1.3 The location for LFG monitoring was not specified in the EM&A Manual since the final design of EcoPark was not available when the EM&A Manual was approved. Therefore, during the joint site inspection on 27 July 2009, three monitoring locations in Phase 1 were identified and agreed as suitable monitoring locations by the ET Leader, IEC and the Operator. Subsequently, two more monitoring locations in Phase 2 were proposed by the ET Leader and agreed by the IEC and the Operator *via* email in January 2011. These five monitoring locations are listed in *Table 2-1* and shown in *Figure 2-1*.

**Table 2-1 Operation Phase LFG Monitoring Locations in EcoPark** 

Monitoring Station ID	Туре	Locations
EP1-1	LFG vent pipe	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
EP2-1	Service void	HGC Broadband below-ground chamber outside Lot P1
EP2-2	Service void	HGC Broadband below-ground chamber outside Lot P3

- 2.1.4 Figure 2-2 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.
- 2.1.5 Routine LFG monitoring has been carried out on a quarterly basis. Should EPD alert the Operator that high LFG levels have been detected during monthly monitoring under the Siu Lang Shui Landfill restoration contract, 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. To-date, EPD have not alerted the Operator.

# 2.2 Environmental Quality Performance Limits and EAP

2.2.1 The Action / Limit Levels and Event Action Plan (EAP) for LFG are shown in *Table 2-2*, below. 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 the operation phase EM&A.



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

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

#### 2.3 Environmental Audit of Non-Monitored Parameters

- 2.3.1 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 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.
- 2.3.2 The following parameters are required to be audited as part of the operation phase EM&A programme:
  - 1. Air Quality;
  - 2. Water Quality;
  - 3. Waste Management; and
  - 4. Land Contamination.

# 2.4 Environmental Mitigation Measures

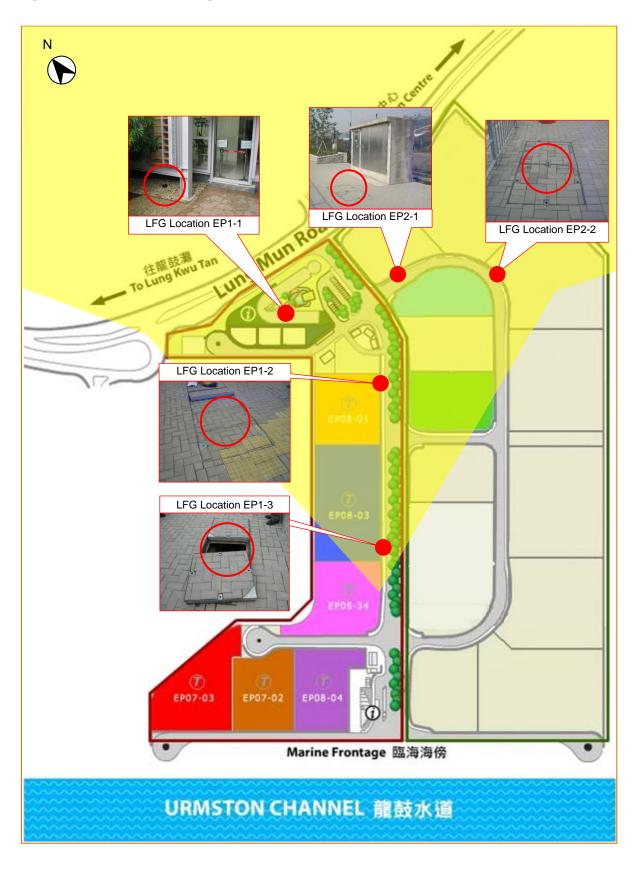
2.4.1 Environmental mitigation measures applicable to the operation phase EM&A as stated in the Implementation Schedule are summarised in *Appendix 1*.

# 2.5 Environmental Requirements in Tenancy Agreements

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



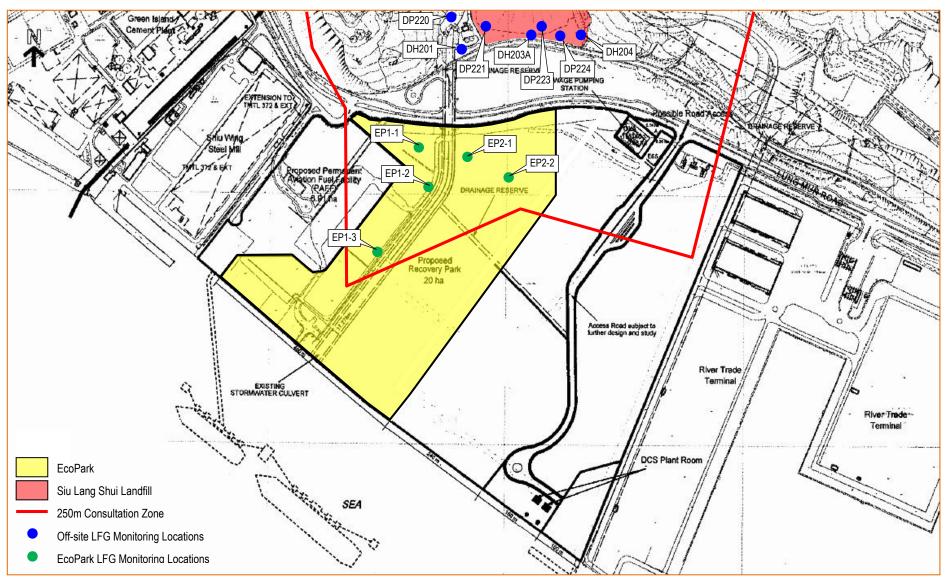
Figure 2-1 LFG Monitoring Locations within EcoPark



Area Within the Shiu Lang Shui Landfill Gas Consultation Zone



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





#### 3 OPERATION STATUS

#### 3.1 General

- 3.1.1 *Figure 3-1* shows the location of lots within EcoPark, the tenancy reference numbers and tenant names. A summary of waste throughputs is provided in *Section 3.10*.
- 3.1.2 The first batch of Phase 2 lots was awarded to new tenants in August 2011 and the preparation works are being carried out. Therefore, none of the new tenants are yet onsite and there is no operation status to be discussed in this section. The new tenants are indicated in *Figure 3-1*.
- 3.1.3 A summary of waste throughputs for all active tenants is provided in **Section 3.10**.

#### 3.2 Champway Technology Ltd.

Lot No.: EP07-03 (Phase 1)
 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
- 3.2.1 Following a trial run in May and June 2010, recycling activities commenced in July 2010. By end of this reporting quarter, majority of empty barrels have been removed from the lot. In addition, all empty barrels were removed from Lot R1, next to Telford's lot, by the end of this reporting quarter.

#### 3.3 Shiu Wing Steel Ltd.

• Lot No.: EP08-03 (Phase 1)

• Lot Size: Approx. 9,500m<sup>2</sup>

Activity: Recycling of Waste Metals

- Recycling Process: Turn waste metals into light ferrous scrap and heavy ferrous scrap by sorting, baling and shearing
- 3.3.1 Following a trial run in May and June 2010, recycling activities commenced in July 2010. In this reporting quarter, large amounts of waste metal/steel scrap have been processed.

# 3.4 Hong Kong Hung Wai Wooden Board Co.

Lot No.: EP06-034 (Phase 1)

• Lot Size: Approx. 5,000m<sup>2</sup>

• 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.



3.4.1 Following a trial run in May and June 2010, recycling activities commenced in July 2010. The plant operation has been suspended and stopped receiving wood since October 2011.

#### 3.5 Li Tong Group

• Lot No.: EP07-02 (Phase 1)

• Lot Size: Approx. 6,500m<sup>2</sup>

Activity: Recycling of WEEE

- Recycling Process: Manually dismantling of WEEE into metals (ferrous materials, aluminium, etc.) and non-metals (fibres, plastics, etc.). Manually dismantling of CRT glass and LCD panels would be carried out upon request.
- 3.5.1 Li Tong was applying for an export permit for waste battery in the reporting quarter.

#### 3.6 Hong Kong Telford Envirotech Group Ltd.

• Lot No.: EP08-01 (Phase 1)

Lot Size: Approx. 5,000m<sup>2</sup>

Activity: Recycling of Waste Plastics

• Recycling Process: Sorting, shredding and extrusion of waste plastics

3.6.1 As of end-April 2012, plastic bags have been stockpiled in the lot since July 2009, and other plastic waste and some recycling equipments could also be found. Trial operation of the new PET machine commenced since in January 2012.

# 3.7 Cosmos Star Holdings Co. Ltd.

• Lot No. EP08-04 (Phase 1)

• Lot Size: Approx. 4,000 m<sup>2</sup>

- · Activity: Recycling of materials arising from industrial and commercial activities
- 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.
- 3.7.1 A building contractor was engaged in October 2010 and construction works have commenced since December 2010. As of end-April 2012, construction of factory building has been carried out.

# 3.8 YOT EcoPark Plastic Resources Recycling Centre

Lot No.: P7 (Phase 2)

• Lot Size: Approx. 5,000 m<sup>2</sup>

Activity: Recycling of waste plastics

 Recycling Process: Convert mixed waste plastics into pellets/flake/baled materials by pre-washing, sorting, flaking, secondary washing, drying, extrusion and chipping.



3.8.1 Recycling activities commenced after trial operation in March 2010. In this reporting quarter, large amount of waste plastics have been sorted.

#### 3.9 St. James' Settlement "WEEE GO GREEN" EcoPark

Lot No.: P5 (Phase 2)
 Lot Size: Approx. 5,000 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.
- 3.9.1 After completion of construction works in September 2010, recycling activities commenced in October 2010.

#### 3.10 Throughput Statistics

- 3.10.1 The first batch of Phase 2 lots was awarded to new tenants in August 2011, but none of the new tenants are yet on-site and so there is no throughput to discuss in this section.
- 3.10.2 For the active recyclers, most of the waste materials and products were delivered by land transportation. Wood chips generated by Hung Wai were delivered by marine transportation, although operation has been suspended since October 2011.
- 3.10.3 The throughputs of the reporting quarter are summarised in *Table 3-1*, below. Please note that product output plus waste disposal does not necessarily equal the waste input, due to material losses during processing and material retained within the lot.

Table 3-1 Throughput Statistics for February 2012 to April 2012

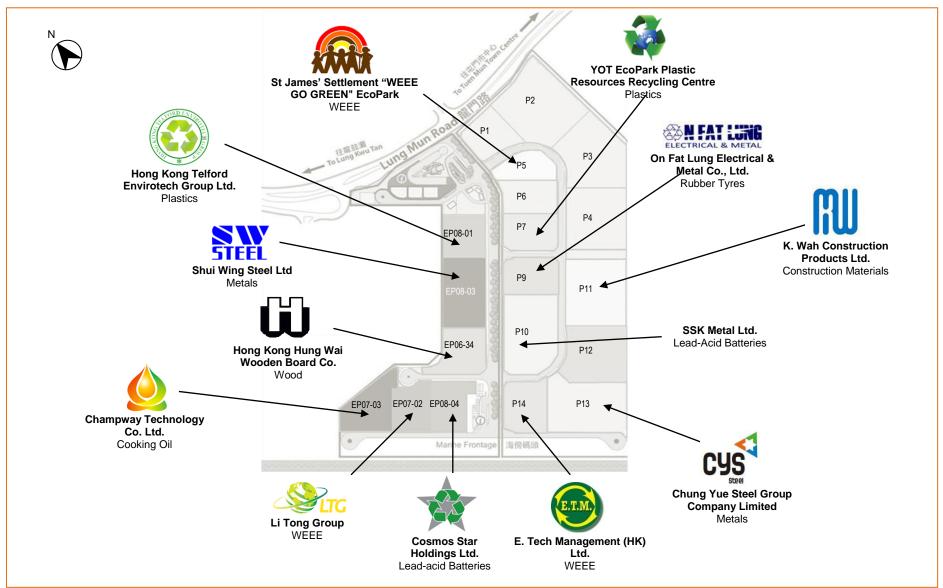
Tenant	Waste Materials	Waste Input (tonnes)	Product Output (tonnes)	Product Output (pieces)	Waste Disposal (tonnes)
Champway [Note 1]	Waste Oil	2,380	561	-	1,250
Hung Wai	Waste Wood	-	-	-	-
Li Tong	WEEE	140	93	-	-
Shiu Wing	Waste Metals	12,017	12,017	-	-
Telford	Waste Plastic	100	_ [Note 3]	-	-
Yan Oi Tong	Waste Plastic	374	336	-	45
St James' Settlement	WEEE	71	45	1,398	6

#### Notes:

- 1. Output includes biodiesel and glycerine.
- 2. The plant operation has been suspended and stopped receiving wood since October 2011.
- The trace quantity of output produced by Telford is considered as negligible and throughput data is available up to February 2012.
- 3.10.4 Detailed throughput figures are provided in *Appendix 3*.



Figure 3-1 Current Lot Usage Within EcoPark





# 4 IMPLEMENTATION STATUS OF ENVIRONMENTAL PROTECTION MEASURES

- 4.1.1 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*.
- 4.1.2 As of end-April 2012, seven tenants (Champway, Shiu Wing, Hung Wai, Li Tong, Yan Oi Tong, Telford and St. James' Settlement) have commenced recycling activities within their lots. Appropriate environmental protection measures are in place.



#### 5 MONITORING RESULTS

#### 5.1 Monitoring Date, Time, Frequency and Duration

5.1.1 LFG monitoring is conducted on a quarterly basis. In this reporting quarter, monitoring was undertaken on 19 April 2012. Monitoring details are shown in *Table 5-1*, below.

Table 5-1 Sampling Schedule for LFG Monitoring

Station ID	Sampling Date	Time	Duration	Ambient Air Temp.	Weather
EP1-1		10:35 – 10:38	3 minutes	20°C	Cloudy
EP1-2		10:17 – 10:20	3 minutes	20°C	Cloudy
EP1-3	19 April 2012	10:10 – 10:13	3 minutes	20°C	Cloudy
EP2-1		10:22 – 10:25	3 minutes	20°C	Cloudy
EP2-2		10:26 – 10:29	3 minutes	20°C	Cloudy

#### 5.2 Monitoring Methodology, Parameters and Equipment

5.2.1 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 5-2*, below.

Table 5-2 Parameters and Measurement Ranges for LFG Monitoring

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

- 5.2.2 LFG monitoring shall be carried out using intrinsically-safe, portable multi-gas monitoring instruments. The gas monitoring equipment shall:
  - 1. where possible, comply with BS 6020 and be approved by BASEEFA as intrinsically safe, suitable for use in a Zone 2 are to BS 5345.
  - 2. be capable of continuous monitoring of methane, oxygen and carbon dioxide.
  - 3. be capable of continuous barometric pressure and gas pressure measurements.
  - 4. normally operate in diffusion mode unless required for spot sampling, when it should be capable of operating by means of an aspirator or pump.
  - 5. have low battery, fault and over range indication incorporated.
  - 6. store monitoring data, and shall be capable of being down-loaded directly to a PC.
  - 7. 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)



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

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

#### 5.3 Types of Equipment Used and Calibration Details

5.3.1 One InfraRed Gas Analyser Model GA94A (serial number GA3385) was used for LFG measurements. The gas analyser is calibrated at least every 18 months. *Appendix 4* presents the monitoring equipment calibration records.

#### 5.4 Results and Graphical Plots of Monitoring Parameters

5.4.1 LFG monitoring results are summarised in *Table 5-3* and compared with the Action and Limit Levels tabulated in *Table 2-2*. Graphical plots of the monitoring results are also provided in *Appendix 5*.

**Table 5-3 LFG Monitoring Results** 

		Monitoring Results				
Station ID	Sampling Date	CH <sub>4</sub> (% v/v)	CH <sub>4</sub> (% LEL)	O <sub>2</sub> (% v/v)	CO <sub>2</sub> (% v/v)	Barometric Pressure (mBar)
EP1-1		0.0	0	21	0.0	996
EP1-2		0.0	0	21	0.1	996
EP1-3	19 April 2012	0.0	0	21	0.0	996
EP2-1		0.0	0	21	0.0	996
EP2-2		0.0	0	21	0.0	996

5.4.2 With reference to the monitoring results, no Action or Limit Level exceedance was recorded.



#### **6 SUMMARY OF TENANT AUDITS**

#### 6.1 General

- 6.1.1 The first batch of Phase 2 lots was awarded to tenants in August 2011 and none of the new tenants are yet on-site. As such, site audits for the new tenants were not carried out.
- 6.1.2 Environmental audits of active tenants and the general EcoPark audit were carried out by the ET on 22 February 2012, 21 March 2012 and 19 April 2012. Quarterly IEC audit was carried out on 19 April 2012.
- 6.1.3 The audits were conducted based on the approved site inspection checklist. The completed audit checklists for tenants are provided in *Appendix 6*.

#### 6.2 Champway Technology Ltd.

6.2.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-1*, below.

**Table 6-1 Environmental Audit Findings for Champway** 

Date	Item	Comment	Status
Observations From Pr	evious Reporting Quarte	ers	
16/01/2012	Oil leakage from the container.	The Tenant was reminded to replace the damaged containers and clear the leaked oil.	The damaged containers and leaked oil were not observed during site audit on 22/02/2012.
16/01/2012	Grease was found near the new oil water mixer tank.	The Tenant was reminded to clear the grease.	No grease near the oil water mixture storage tank was observed during site audit on 21/03/2012.
16/01/2012	Oil was observed near the processed tank.	The Tenant was reminded to clear the oil.	No grease near the oil water mixture tank was observed during site audit on 21/03/2012.
Observations From Th	is Reporting Quarter		
22/02/2012	Oil leakage from containers was observed.	The Tenant should replace the damaged containers and clean up the leaked oil as soon as possible.	No damaged oil container was observed during site audit on 19/04/2012.
22/02/2012	Oil stains were observed outside the entrance of the lot which was temporarily borrowed from SGJV (Lot R1).	The Tenant was reminded to clean up the oil stains.	No oil stains were observed during site audit on 21/03/2012.



Date	Item	Comment	Status
21/03/2012	The oil containers at Lot R1 have been removed by the Tenant. However,	The Tenant should properly clear the contaminated soil as soon as possible.	SGJV sent a reminder to the tenant on 11 May 2012.
	some soil surfaces of the lot were found to be oil contaminated.		The status will be followed up in the next audit.
19/04/2012	An outlet of the odour removal device was found to be collapsed.	The Tenant should fix the outlet.	The status will be followed up in the next audit.

6.2.2 The completed checklist for Champway is provided in *Appendix 6-1*. The next audit will follow-up any unresolved issues.

#### 6.3 Shiu Wing Steel Ltd.

6.3.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-2*, below.

Table 6-2 Environmental Audit Findings for Shiu Wing

Date	Items	Comments	Status
Observations From Pr	evious Reporting Quart	ers	
	None.		
Observations From TI	nis Reporting Quarter		
22/02/2012	No critical issues were i	dentified.	
21/03/2012	No critical issues were identified.		
19/04/2012	No critical issues were i	dentified.	

6.3.2 The completed checklist for Shiu Wing is provided in *Appendix* 6-2.

# 6.4 Hong Kong Hung Wai Wooden Board Co.

6.4.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-3*, below.

Table 6-3 Environmental Audit Findings for Hung Wai

Date	Items	Comments	Status				
Observation	Observations From Previous Reporting Quarters						
	None.						
Observation	ns From This Reporting Qu	arter					
22/02/2012	No critical issues were identified.						
21/03/2012	No critical issues were identified.						
19/04/2012	No critical issues were ider	ntified.					

6.4.2 The completed checklist for Hung Wai is provided in *Appendix 6-3*.



#### 6.5 Li Tong Group

6.5.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-4*, below.

Table 6-4 Environmental Audit Findings for Li Tong

Date	Items	Comments	Status	
Observations From Pr	evious Reporting Quart	ters		
16/01/2011	Non-chemical wastes were found in the chemical waste storage room.	The Tenant was reminded to remove the non-chemical wastes from the storage room.	No non-chemical wastes were observed in chemical waste storage room during site audit on 22/02/2012.	
Observations From Th	nis Reporting Quarter			
22/02/2012	No critical issues were identified.			
21/03/2012	No critical issues were identified.			
19/04/2012	No critical issues were	identified.		

6.5.2 The completed checklist for Li Tong is provided in *Appendix 6-4*.

#### 6.6 Hong Kong Telford Envirotech Group Ltd.

6.6.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-5*, below. The next audit will follow-up any unresolved issues.

Table 6-5 Environmental Audit Findings for Telford

Date	Items	Comments	Status	
Observations From P	revious Reporting Quar	ters		
16/01/2012	Oil Stains was observed.	The Tenant was reminded to clear the oil stains and prevent land contamination.	Preventive measures for residual oil runoff were observed in 22/02/2012 site audit.	
Observations From T	his Reporting Quarter			
22/02/2012	No critical issues were identified.			
21/03/2012	No critical issues were identified.			
19/04/212	No critical issues were	identified.		

6.6.2 The completed checklist for Telford is provided in *Appendix 6-5*.

# 6.7 YOT EcoPark Plastic Resources Recycling Centre

6.7.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in



6.7.2 *Table* 6-6 below. The next audit will follow-up any unresolved issues.



Table 6-6 Environmental Audit Findings for Yan Oi Tong

Date	Items	Comments	Status	
Observations From Pr	evious Reporting Quart	ters		
16/01/2012	The general refuses were found near the surface channel.	The Tenant was reminded to remove the general refuse.	General refuses had been removed before site audit on 22/02/2012.	
Observations From Th	nis Reporting Quarter			
22/02/2012	General refuse was observed near surface channels along site boundary.	The Tenant should properly collect and dispose of the refuse.	General refuses/waste plastics observed near surface channels along site boundary had been cleared before site audit on 21/03/2012.	
21/03/2012	No critical issues were identified.			
19/04/2012	Rubbish was observed inside a catch pit of Lot P6.	The Tenant should clear the rubbish.	The status will be followed up in the next site audit.	

6.7.3 The completed checklist for Yan Oi Tong is provided in *Appendix* 6-6. The next audit will follow-up any unresolved issues.

#### 6.8 St. James' Settlement "WEEE GO GREEN" EcoPark

6.8.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 6-7* below.

Table 6-7 Environmental Audit Findings for St James' Settlement

Date	Items	Comments	Status			
Observation	Observations From Previous Reporting Quarters					
	None.					
Observation	ns From This Reporting Qu	arter				
22/02/2012	No critical issues were ider	ntified.				
21/03/2012	No critical issues were ider	ntified.				
19/04/2012	No critical issues were ider	ntified.				

The completed checklist for St James' Settlement is provided in *Appendix* 6-7. The next audit will follow-up any unresolved issues.



#### 7 SUMMARY OF GENERAL ECOPARK AUDIT

7.1.1 Audit observations from previous reporting quarters and audit observations from this reporting quarter are summarized in *Table 7-1*, below.

**Table 7-1 General EcoPark Audit Findings** 

Date	Items	Comments	Status			
Observations From Previous Reporting Quarters						
	None.					
Observations From This Reporting Quarter						
22/02/2012	No critical issues were identified.					
21/03/2012	No critical issues were iden	ntified.				
19/04/2012	No critical issues were iden	ntified.				

7.1.2 The completed general checklist for EcoPark (and non-active tenants) is provided in *Appendix 7*. The next audit will follow-up any unresolved issues.



# 8 COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

8.1.1 As of end-April 2012, no complaint, notifications of summons or successful prosecutions related to recycling activities were received in this reporting quarter.



#### 9 CONCLUSIONS

- 9.1.1 This is the twentieth (20<sup>th</sup>) quarterly EM&A report prepared for the operation phase of EcoPark and covers February 2012 to April 2012. The tenants' recycling activities are audited on a monthly basis and the results are summarised in this report. In the reporting quarter, there were eight tenants in Ecopark Phase 1 and Phase 2.
- 9.1.2 The first batch of Phase 2 lots of was awarded to new tenants in August 2011.
- 9.1.3 The ET has conducted monthly site inspections, the IEC has carried out quarterly inspections, and some general observations have been made. The approved checklist has been used in the monthly site inspections for various tenants since October 2009.
- 9.1.4 The throughputs of the reporting quarter are summarized in *Table 9-1*, below. Please note that product output plus waste disposal does not necessarily equal the waste input, due to material losses during processing and material retained within the lot.

Table 9-1 Throughput Statistics Occurred During February 2012 to April 2012

Tenant	Waste Materials	Waste Input (tonnes)	Product Output (tonnes)	Product Output (pieces)	Waste Disposal (tonnes)
Champway <sup>[Note 1]</sup>	Waste Oil	2,380	561	-	1,250
Hung Wai <sup>[Note 2]</sup>	Waste Wood	-	-	-	-
Li Tong	WEEE	140	93	-	-
Shiu Wing	Waste Metals	12,017	12,017	-	-
Telford	Waste Plastic	100	[Note 3]	-	-
Yan Oi Tong	Waste Plastic	374	336	-	45
St James' Settlement	WEEE	71	45	1,398	6

#### Notes:

- 1. Output includes biodiesel and glycerine.
- 2. The plant operation has been suspended and stopped receiving wood since October 2011.
- 3. The trace quantity of output produced by Telford is considered as negligible and the throughput data is available up to February 2012.
- 9.1.5 LFG monitoring during this quarter was undertaken on 19 April 2012 at five locations (three in Phase 1 and two in Phase 2). No exceedance of Action/Limit Level was recorded.
- 9.1.6 Numbers of complaints, summons and successful prosecutions are summarised below:
  - Complaints: Zero;
  - Summons: Zero; and
  - Successful Prosecutions: Zero.
- 9.1.7 In the next reporting quarter, operation phase LFG monitoring for Phase 1 and Phase 2 will continue.



# **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			1	<u>'</u>	•
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	у				•
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 Qua	ality				1
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 & 6 of IMO Code of Practice for the Safe Loading/Unloading of Bulk Carriers
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	



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
	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 Ma	nagemer	nt en			
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 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
	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	
Preventio	n of Con	taminated Land		1	
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	During operation, the greatest risk of land contamination will come from storage of chemical wastes, therefore the measures should be followed:	Within EcoPark throughout the life of the facility.	Operator	
		<ul> <li>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.</li> </ul>			
		<ul> <li>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.</li> </ul>			



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
		<ul> <li>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.</li> </ul>			Waste Disposal (Chemical Waste) (General) Regulation
		<ul> <li>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.</li> </ul>			Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes & Chemical Waste (General) Regulation
	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 G	as				
8.7.10 & 8.7.11	6.1.2	<ul> <li>Alert workers and visitors of possible LFG hazards</li> <li>Prohibit smoking and open fires on site</li> <li>Conduct regular (quarterly) LFG monitoring at mobile offices, equipment stores, etc.</li> </ul>	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
Landscap	e and Vis	sual			
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, (c) requirements, prohibitions, restrictions and time limits under the Environmental Permit No. EP-226/2005 as amended by the Variation of Environmental Permit (EP-226/2005/A) (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 (EP-226/2005/A) 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 ongoing 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 (EP-226/2005/A) 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 (EP-226/2005/A) 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 (EP-226/2005/A) (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 (EP-226/2005/A) (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 (EP-226/2005/A) (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 (EP-226/2005/A) (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

- 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 (EP-226/2005/A) 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 (EP-226/2005/A) 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 (EP-226/2005/A) (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
  - (c) 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 (EP-226/2005/A) (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 (EP-226/2005/A) 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 (EP-226/2005/A) 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**

Material and Waste Throughputs



## A3.1 CHAMPWAY TECHNOLOGY LIMITED (Lot EP07-03)

	V	Vaste Input (kg	g)	Pro	duct Output	(kg)		Waste Di	sposal (kg)	
Date	Cooking Oil	Oral		Biodiesel	Glycerine	Total	Inorganic Waste	Organic Waste	Water Waste [Note 1]	Total
Oct-Dec 08	130,000	-	130,000	-	-	-	-	-	-	-
Jan-Dec 09 [Note 2]	1,277,241	726,140	2,003,381	-	-	1,863,143	-	100,169	40,068	140,237
Jan-Dec 10 [Note 2]	1,347,001	1,146,700	2,493,701	1,922,170	83,563	4,254,083	95,976	143,449	98,034	337,459
Jan-Dec 11 [Note 2]	1,409,147	8,083,180	9,492,327	2,381,220	71,438	2,452,658	111,200	1,554,544	3,898,269	5,564,013
Jan-12	114,798	471,550	586,348	60,520	1,816	62,336	8,000	64,589	220,624	293,213
Feb-12	113,765	583,490	697,255	109,510	3,285	112,795	12,800	81,382	285,416	379,598
Mar-12	128,472	616,190	744,662	187,030	5,611	192,641	12,000	63,715	282,848	358,563
Apr-12	112,919	825,460	938,379	248,040	7,441	255,481	16,000	141,396	354,882	512,278
May-12										
Jun-12										
Jul-12										
Aug-12										
Sep-12										
Oct-12										
Nov-12										
Dec-12										

#### Notes:

- 1. Water waste includes slurry and semi-solid waste and is disposed of at landfill.
- 2. Updated throughout data as advised by Tenant after the corresponding Quarterly EM&A Reports were submitted.



## A3.2 SHIU WING STEEL LIMITED (Lot EP08-03)

	Waste Input (kg)		Product Output (kg)		Waste Disposal (kg)
Date	Waste Metal/Steel Scrap /Construction Waste	Light Ferrous Scrap (Baled)	Heavy Ferrous Scrap (Sheared)	Total	Non-ferrous Scrap / General Refuse
Apr-Dec 10 [Note 1]	4,561,540	-	4,561,540	4,561,540	-
Jan-Dec11 <sup>[Note 1]</sup>	18,069,300	-	18,069,300	18,069,300	-
Jan-12	2,171,500	-	2,171,500	2,171,500	-
Feb-12	5,019,090	-	5,019,090	5,019,090	-
Mar-12	3,782,780	-	3,782,780	3,782,780	-
Apr-12	3,214,630	-	3,214,630	3,214,630	-
May-12					
Jun-12					
Jul-12					
Aug-12					
Sep-12					
Oct-12					
Nov-12					
Dec-12					

#### Note:

1. Updated throughout data as advised by Tenant after the corresponding Quarterly EM&A Report was submitted.



## A3.3 HONG KONG HUNG WAI WOODEN BOARD COMPANY (Lot EP06-034)

Date	Waste Input (kg)	Product Output (kg)	Waste Disposal (kg)
Date	Waste Wood	Wooden Board	General Refuse
Jun-Dec 08	38,000	-	-
Jan-Dec 09	120	-	-
Jan-Dec 10 [Note 1]	4,492,330	1,072,000	-
Jan-Dec 11	1,609,500	5,787,500	-
Jan-12	-	-	-
Feb-12	-	-	-
Mar-12	-	-	-
Apr-12	-	-	-
May-12			
Jun-12			
Jul-12			
Aug-12			
Sep-12			
Oct-12			
Nov-12			
Dec-12			

#### Note:

1. Updated throughout data as advised by Tenant after the corresponding Quarterly EM&A Reports were submitted.



## A3.4 LI TONG GROUP (Lot EP07-02)

	Waste Input (kg)		Product Output (kg)		Waste Disposal (kg)
Date	WEEE	Metals (e.g. ferrous metals, aluminium)	Non-metals (e.g. fibres, plastics)	Total	General Refuse
Sep-Dec 10 [Note 2]	85,175	10,484	33,607	44,091	-
Jan-Dec 11 [Note 2]	540,483	59,172	180,678	1,913,421	-
Jan-12	30,108	-	11,005	11,005	-
Feb-12	43,783	-	27,015	27,015	-
Mar-12	48,339	6,692	20,012	26,704	-
Apr-12	47,909	11,581	27,800	39,381	-
May-12					
Jun-12					
Jul-12					
Aug-12					
Sep-12					
Oct-12					
Nov-12					
Dec-12					

#### Note:

- 1. All figures are rounded and presented in integer form.
- 2. Updated throughout data as advised by Tenant after the corresponding Quarterly EM&A Reports were submitted.



## A3.5 HONG KONG TELFORD ENVIROTECH GROUP LIMITED (Lot EP08-01)

Data	Waste Input (kg)	Product Output (kg) [Note 1]	Waste Disposal (kg) [Note 1]
Date	Waste Plastic	PO, PE, PET, PWC	General Refuse
Jul-Dec 09	20,000	-	-
Jan-Dec 10	123,600	-	-
Jan-Dec11	641,000	228,660	-
Jan-11	62,000	-	-
Feb-12	100,000	-	-
Mar-12	-	-	-
Apr-12	-	-	-
May-12			
Jun-12			
Jul-12			
Aug-12			
Sep-12			
Oct-12			
Nov-12			
Dec-12			

#### Note:

- 1. Tenant has not yet commenced formal recycling process within the lot.
- 2. The throughput data is available up to February 2012 during the report preparation.



## A3.6 YOT ECOPARK PLASTIC RESOURCES RECYCLING CENTRE (Lot P7)

Data	Waste Input (kg)	Product Output (kg)	Waste Disposal (kg)
Date	Waste Plastic	Processed Plastic	General Refuse
Apr-Dec 10 [Note 1]	615,178	417,405	110,994
Jan-Dec11 <sup>[Note 1]</sup>	1,087,752	1,011,003	149,263
Jan-12	105,449	96,075	2,840
Feb-12	122,027	114,645	9,226
Mar-12	138,079	115,674	19,000
Apr-12	113,495	105,677	16,370
May-12			
Jun-12			
Jul-12			
Aug-12			
Sep-12			
Oct-12			
Nov-12			
Dec-12			

#### Note:

1. Updated throughout data as advised by Tenant after the corresponding Quarterly EM&A Report was submitted.



# A3.7 ST. JAMES' SETTLEMENT "WEEE GO GREEN" ECOPARK (Lot P5)

	Waste Input (kg)			Product Outp	ut (kg)		Wa	ste Disposal	(kg)
Date	WEEE	Repaired / Refurbished EEE (pieces) [Note 2]	Reusable Parts	Metals (e.g. ferrous metals, aluminium)	Non-metals (e.g. fibres, plastics)	Total	General Refuse	Chemical Waste	Total
Oct-Dec 10 [Note 2]	52,374	1,021	-	-	540	1,021 pieces + 540 kg	1,925	240	2,165
Jan-Dec11 [Note 2]	290,839	5,412	-	94,144	40,487	5,412 pieces + 134,631 kg	15,989	2,209	18,198
Jan-12 <sup>[Note 2]</sup>	18,118	432	-	9,807	5,749	429 pieces + 15,556 kg	5,925	182	6107
Feb-12	21,784	473	-	8,268	6,710	473 pieces + 14,978 kg	878	600	1,478
Mar-12	30,148	502	-	21,005	4,610	502 pieces +25,615 kg	2,487	122	2,609
Apr-12	19,000	423	-	3,870	290	423 pieces +4,160 kg	1,775	166	1,941
May-12									
Jun-12									
Jul-12									
Aug-12									
Sep-12									
Oct-12									
Nov-12									
Dec-12									

#### Notes:

- 1. All figures are rounded and presented in integer form.
- 2. Updated as advised by Tenant after the corresponding Quarterly EM&A Report was submitted.



## **APPENDIX 4**

Calibration Certificate of Infrared Gas Analyser

#### **FUGRO TECHNICAL SERVICES LIMITED**

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

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



Report No.

103812EN120419

Page 1 of 1

### **Test Report on Landfill Monitoring**

#### Information Supplied by Client

Client

SMEC Asia Limited

Client's address

27/F., Ford Glory Plaza, 37-39 Wing Hong Street,

Cheung Sha Wan, Kowloon, Hong Kong

Project

**EcoPark Operation EM&A** 

Sample description

Five samples of gas

Sampling location

EP1-1 Inside the Landscaping area of Administration Building

EP1-2 PCCW below-ground chamber outside Lot EP08-01

EP1-3 HGC Broadband below-ground chamber outside Lot EP08-03 EP2-1 HGC Broadband below-ground chamber outside Lot P1 EP2-2 HGC Broadband below-ground chamber outside Lot P3

Test required

For all locations -

In-situ measurement of methane, carbon dioxide, oxygen and

barometric pressure

Laboratory Information

Date of in-situ testing

19/04/2012

Test method used

Measured by Infra Red Gas Analyser GA94A

#### Results:

Sampling	Sampling	Barometric pressure,	Meth	nane	Carbon dioxide,	Oxygen,
location	time	mbar	%v/v	%LEL	%v/v	%v/v
EP1-1	10:35	996	0.0	0	0.0	20.5
EP1-2	10:17	996	0.0	0	0.0	20.7
EP1-3	10:10	996	0.0	0	0.0	20.8
EP2-1	10:22	996	0.0	0	0.0	20.6
EP2-2	10:26	996	0.0	0	0.0	20.1

Remarks: 1. A calibration certificate of the monitoring equipment is attached for reference.

2. A layout plan showing the sampling location is also attached for reference.

Supervised by:

K.F. Wona

Certified by

Approved Signatory: HO Kin Man, John Manager - Chemistry Department

Date

\*\* End of Report

Note: This report refers only to the sample(s) tested.

### **FUGRO TECHNICAL SERVICES LIMITED**

MateriaLab Division, Fugro Development Centre,

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

: +852-2450 8233 : +852-2450 6138 E-mail: matlab@fugro.com.hk

Website: www.materialab.com.hk



### REPORT ON CALIBRATION OF INFRA RED GAS ANALYSER

Client

Fugro Technical Services Limited - MateriaLab 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

23/12/2011

Next calibration date

23/06/2012

Method used

In-house method (Comparison with Standard Gas)

#### Results:

Parameters	Standard Gas Concentration,	Infra Red Gas Analyser Reading,	Deviation,
	% volume	% volume	% volume
Methane (CH₄)	1.02	0.9	-0.12
Carbon dioxide (CO <sub>2</sub> )	15.0	15.0	0.0
Oxygen (O <sub>2</sub> )	1.03	0.9	-0.13

Calibrated by : \_\_\_\_\_ C. F. Leung

Certified by

mor Approved Signatory : Raymond K. F. Wong

Assistant Manager

Chemical & Environmental

Date \*\* End of Report \*

Note: This report refers only to the sample(s) tested.

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# **APPENDIX 5**

**Graphical Plots of LFG Monitoring** 

# Contract No. EP/SP/53/06 Provision of Management Services for EcoPark in Tuen Mun Area 38 EM&A Services

Landfill Gas Monitoring Results -

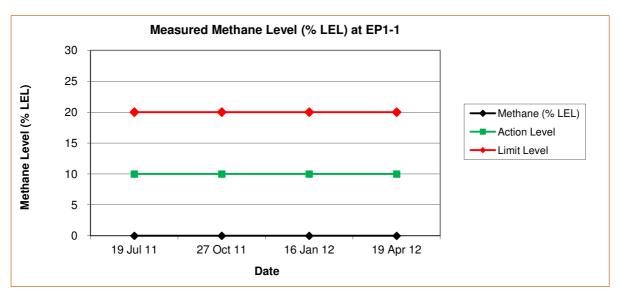
Apr-2012

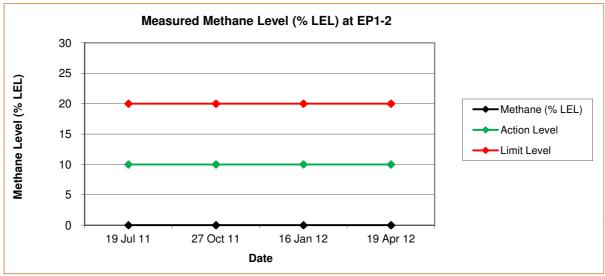
									Measureme	nt Results			Action Level			Limit Level		
Monitoring Station ID	Monitoring Locations	Date	Weather Conditions	Temperature (degree)	Start Time	End Time	Met	hane	Oxygen	Carbon Dioxide	Barometric Pressure	Methane	Oxygen	Carbon Dioxide	Methane	Oxygen	Carbon Dioxide	Remarks
							% v/v	% LEL	% v/v	% <b>v</b> /v	mBar (absolute)	% LEL	% <b>v</b> /v	% v/v	% LEL	% v/v	% v/v	
EP1-1	Inside the landscaping area of Administration Building			20	10:35	10:38	0.0	0.0	21	0.0	996							Nil
EP1-2	PCCW below- ground chamber outside Lot EP08-01			20	10:17	10:20	0.0	0.0	21	0.1	996							Nil
EP1-3	HGC Broadband below-ground chamber outside Lot EP08-03	19 Apr 12	Cloudy	20	10:10	10:13	0.0	0.0	21	0.0	996	> 10	< 19	> 0.5	> 20	< 18	> 1.5	Nil
EP2-1	HGC Broadband below-ground chamber outside Lot P1			20	10:22	10:25	0.0	0.0	21	0.0	996							Nil
EP2-2	HGC Broadband below-ground chamber outside Lot P3			20	10:26	10:29	0.0	0.0	20	0.0	996							Nil

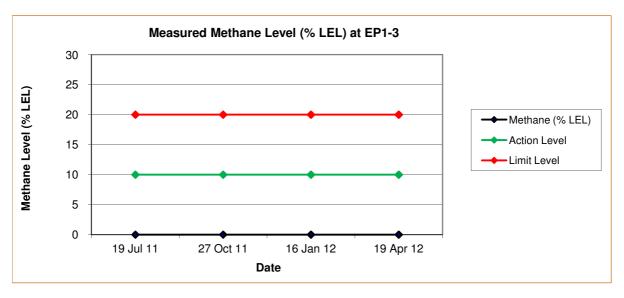
#### Note

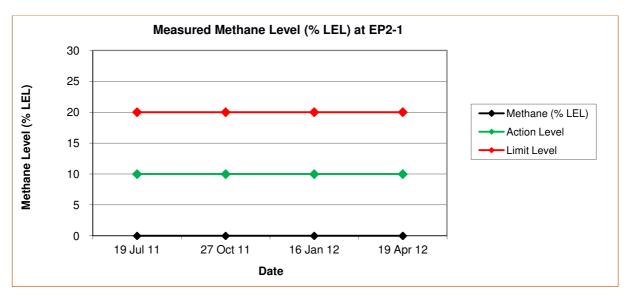
<sup>(1)</sup> Underlined figure indicates an exceedance of Action Level

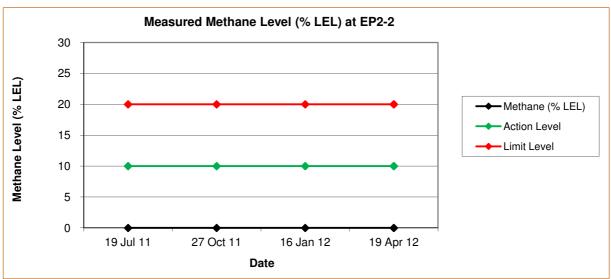
<sup>(2)</sup> Shaded area indicates an exceedance of Limit Level

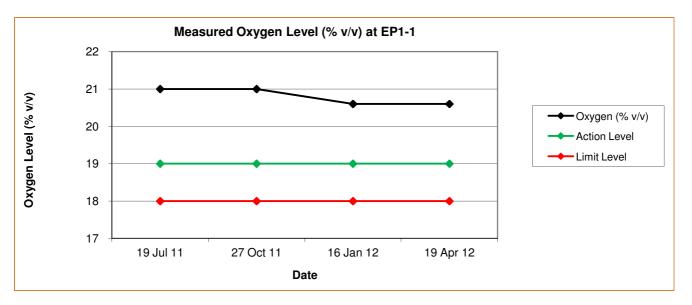


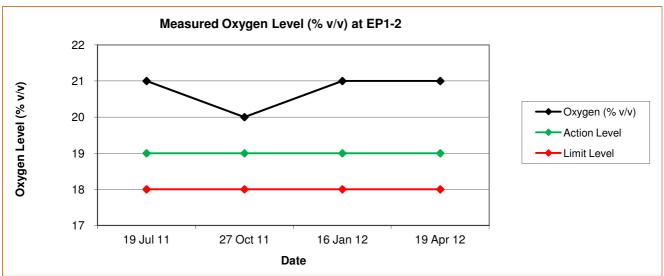


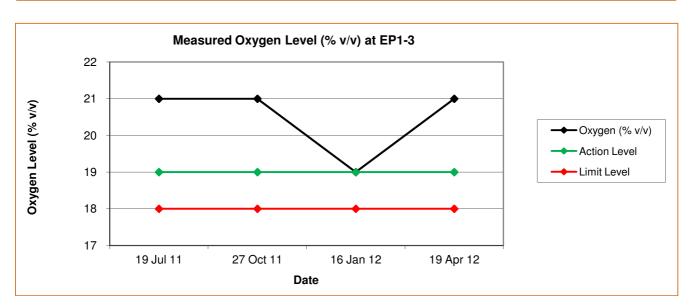


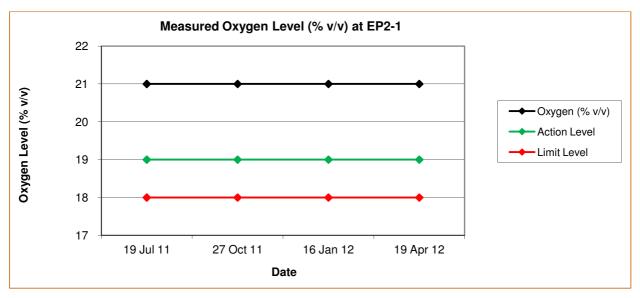


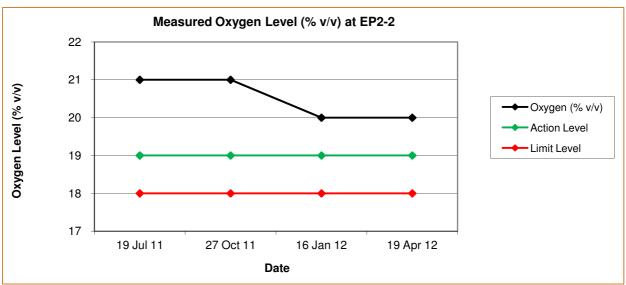


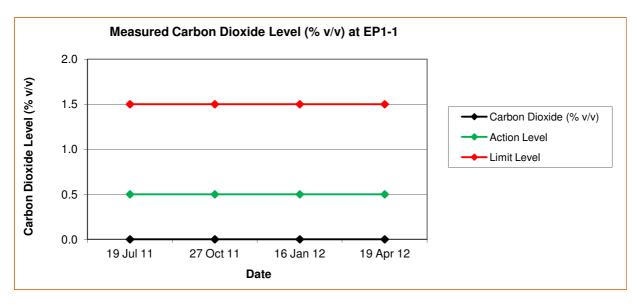


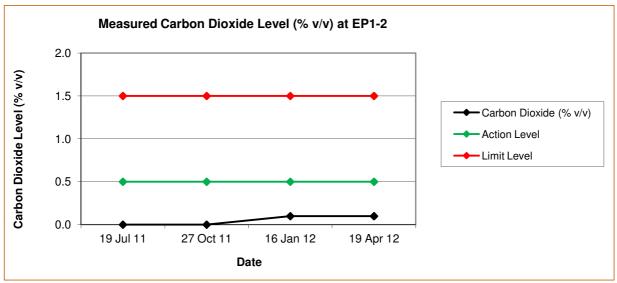


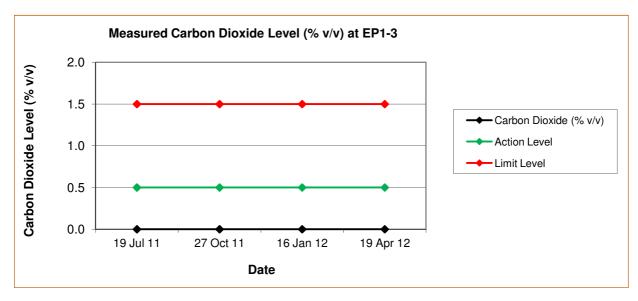


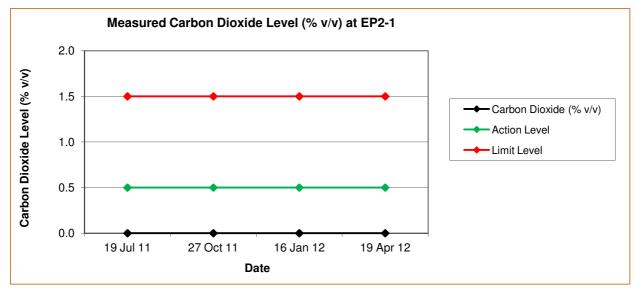


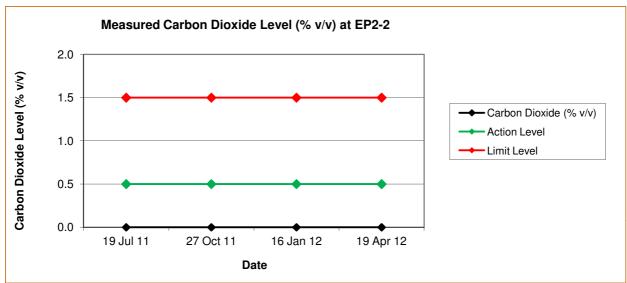


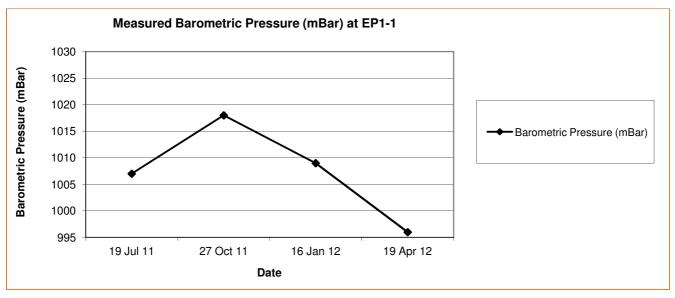


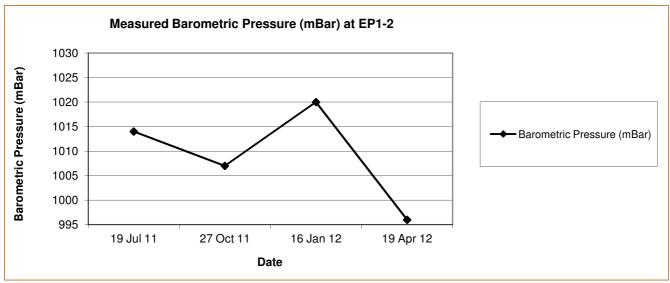


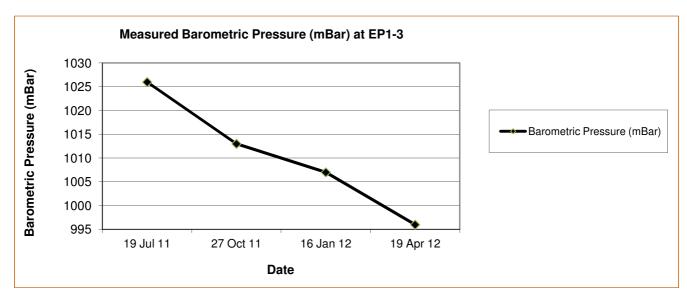


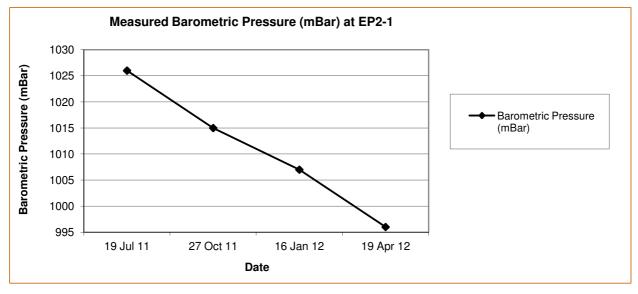


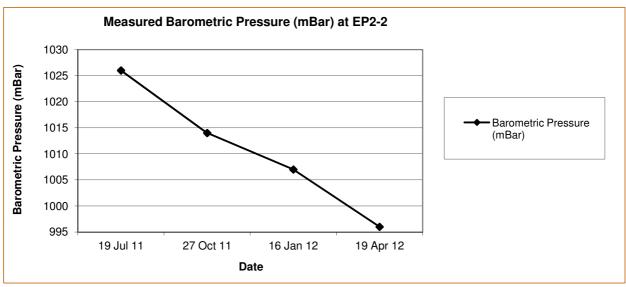














# **APPENDIX 6**

Tenant-specific Audit Checklists for the Reporting Quarter



### **APPENDIX 6-1**

Tenant-specific Audit Checklists for the Reporting Quarter

Champway Technology Ltd.



	Audit Details							
Ten	ant	Champway Tech	nolo	gy Ltd	l			
Dat	e & Time	Date 22 Februa	ary 2	.012			Tin	ne 11:00am
Lot	No.	EP07-03		_				
Aud	dit Ref.	19		_				
IEC	Joint Inspection	Yes	$\boxtimes$	No				
Wea	ather Conditions	Fine		Hazy			$\boxtimes$	Overcast Rain
Win	ıd	⊠ Calm		Light	Bre	eze		Strong Wind
Ten	nperature	19 °C						
Hur	midity	Low		Medi	um		$\boxtimes$	High
	1. General							
	Description			Υ	es	No	N/A	Remarks
1.1	EP for Tenant disp	layed on notice bo	ards					EP for EcoPark (EP-226/2005/A) is
	at entrance?							displayed at the entrance of EcoPark. EP for Tenant is not required.
								•
1.2	Environmental Poli	cy documented?					$\boxtimes$	Operator's Environmental Policy is documented. Tenant follows this.
								documented. Tenant follows this.
						_		
1.3	Environmental Mar	nagement Plan upo	dated	d? [		Ш	$\boxtimes$	
1.4	a. Emergency Res	ponse Plan (ERP)					$\boxtimes$	Operator's ERP is documented. Tenant
	documented?							follows this.
	b. Drill / training red	cords available?						Tenant does not keep records for ERP training.
4.5	Franksia in training		<u> </u>			_		Toward Issues a training research for DDI
1.5	Employee's training	g record available :		L	$\boxtimes$	Ш	Ш	Tenant keeps a training record for BPI.
1.6	Any record of prose	ecution / complaint	?			$\boxtimes$		
1.7	Waste Managemer	nt Plan?					$\boxtimes$	Operator's WMP is documented. Tenant follows this.



### 2. Water Quality **Description** Yes No N/A Remarks Valid Effluent Discharge License available? Licence No. WT00004430-2009 valid 2.1 $\square$ $\square$ until 31 July 2014. 2.2 Any wastewater treatment facility prior to $\square$ $\square$ Oil interceptor & grease trap. effluent discharge? $\square$ $\square$ $\square$ If yes, facility is properly maintained and function normally? **Effluent Monitoring** As per the discharge licence, selfmonitoring shall be performed when 2.3 a. Sampling / Monitoring Record available? required. b. Monitoring frequency met the license requirement? $\sqcap$ $\sqcap$ $\boxtimes$ c. Any exceedance? d. If yes, follow-up action taken? Surface run-off control measures in place $\square$ $\square$ 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage system? 2.6 All manholes are covered? Foam, oil, grease, litter or other See Follow-up Action #1. 2.7 $\square$ $\square$ objectionable matters in water of nearby drain / sewer are avoided? 2.8 Drainage system is well maintained to prevent flooding and overflow?



9 _	Processes with high Risk of Contamination	$\boxtimes$		
_	<ul> <li>Discourse / Carb Man Carb To Carb</li></ul>			
_	a. Processes / activities are located under a covered area?			
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?			Stop-logs are available for use by the Tenant if needed.
_	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			No contaminated water.
	Equipment oil and lubrication replacements are performed only in bunded maintenance area?			Oil replacement (of the heat transmission system) is carried out offsite when needed. This may be needed once every ten years or so.
11	a. Oil interceptor provided for drainage discharging from maintenance area?	$\boxtimes$		
_	b. If yes, oil and grease removed regularly?	$\boxtimes$		
_	c. Collected by licenced collector?	$\boxtimes$		
	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?		$\boxtimes$	
_	b. Materials and bulk cargo are properly packed?		$\boxtimes$	



	3. Air Quality				
	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?				
	Odour	$\boxtimes$			Yes but the odour was relatively minor.
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				From the gaps of the cover of the Surplus Water with Dregs Storage Tank, the Oil/Water Mixture Storage Tanks during cleaning or transfer of oil to the oil separators, grease trap waste storage tank, uncovered oil buckets and oil stains on ground.
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?				Odour is treated by activated carbon. Activated carbon will be replaced every week or when necessary.
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			$\boxtimes$	No dusty materials were found to be used on-site.
	Dust Monitoring			$\boxtimes$	Not required according to the PRC.
3.4	a. Monitoring Record available?				
	b. Monitoring frequency met the requirement?				
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?				
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?				



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed on-site.
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:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
-	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
-	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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	Approval from Authority for the use of controlled refrigerant?			$\boxtimes$	
-	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			Used by all diesel vehicles, fork-lift truck and emergency generator.



### 4. Waste / Chemical Management **Description** Yes No N/A Remarks Registration No. 6311-421-C3617-01 **Chemical Waste Producer Registration** 4.1 $\square$ $\square$ completed? for spent lubricating oil and spent mineral oil. 4.2 Provision of sufficient waste disposal points/ receptacles? Waste disposed of regularly and properly? $\square$ $\square$ 2-3 times a week. 4.4 Sorting of materials on-site for reuse or disposal to designated outlet? Record of quantities of waste generated, 4.5 recycled and disposed properly kept and easily retrieved for inspection? 4.6 Sludge is collected by a licensed collector at regular intervals? Packaging of Chemical Waste a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\boxtimes$ No spillage. the use of an absorbent? d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste a. Label is securely attached, clean and 4.8 visible? $\square$ $\square$ b. Label is in proper dimension and bilingual? c. Information is accurate and sufficient?



	4. Waste / Chemical Management (contin	ued)			
	Description	Yes	No	N/A	Remarks
.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?			$\boxtimes$	
-	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?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	No collection.
11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?				No bulk storage.
-	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	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?			$\boxtimes$	
5.3	Good housekeeping?		$\boxtimes$		See Action #1 and 2, Follow-up Action #2.
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?	$\boxtimes$			DG licences for storing methanol, sulphuric acid and fatty acid methyl esters (FAME) obtained (Nos. 021229, 021228 & 021227, and 021225 & 021226). DG licence for manufacturing FAME obtained (No. 001456).
	b. Storage area in compliance with the approved plan?	$\boxtimes$			
	c. Storage area(s) has been securely locked?	$\boxtimes$			
	d. Total storage capacity in compliance with the relevant statutory requirement?	$\boxtimes$			
	e. Proper Labelling?	$\boxtimes$			
	f. Dangerous goods properly packaged?	$\boxtimes$			
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



#### **Action Items from This Audit**

No. Action Expected By

1. Oil leakage from containers was observed. The Tenant should replace the damaged containers and clean up the leaked oil as soon as possible.



2. Oil stains were observed outside the entrance of the lot which was temporarily borrowed from SGJV. The Tenant was reminded to clean up the oil stains.



#### **Follow-up from Previous Audits**

#### No. Follow-up from Previous Audit Dated 16 January 2012

1. The damaged containers and leaked oil were not observed.



Observed on 16 January 2012



Observed on 22 February 2012

**Status** 

Closed



# Follow-up from Previous Audits

#### No. Follow-up from Previous Audit Dated 16 January 2012

**Status** 

2. The Tenant advised that grease near the oil water mixture storage tank was cleared, however, grease was still observed. The Tenant should clean up the grease ASAP.

Outstanding





Observed on 16 January 2012

Observed on 22 February 2012

3. The Tenant advised that grease near the oil water mixture storage tank was cleared, however, grease was still observed. The Tenant should clean up the grease ASAP.

Outstanding







Observed on 22 February 2012

#### **Audit Summary and Sign-off**

The Tenant was reminded to replace the damaged containers and clean up the leaked materials. The Tenant was also reminded to clear the oil stains observed outside the entrance of the lot temporarily borrowed from SGJV after the removal of oil containers is completed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Champway	Serco Guardian JV
Signed By	Winnie MA	-	Allen ZHOU	Morgan CHIU
Role	ET Site Auditor	IEC	Managing Director	Park Manager
Signature	Diraco	-	营建	1

Note: \* IEC to sign-off only for a joint ET+IEC Inspection



	Audit Details						
Ter	nant	Champway Tech	nolo	gy Ltd			
Dat	e & Time	Date 21 March	2012	2		Tin	ne <u>11:00am</u>
Lot	No.	EP07-03		_			
Aud	dit Ref.	20		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
We	ather Conditions	Fine	$\boxtimes$	Hazy			Overcast Rain
Wir	nd	Calm	$\boxtimes$	Light Br	eeze		Strong Wind
Ter	mperature	<u>19</u> °C					
Hui	midity	Low	$\boxtimes$	Medium			High
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant disp at entrance?	layed on notice boo	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Pol	icy documented?					Operator's Environmental Policy is documented. Tenant follows this.
1.3	Environmental Mar	nagement Plan upo	lated	l?		$\boxtimes$	
1.4	a. Emergency Res documented?	ponse Plan (ERP)					Operator's ERP is documented. Tenant follows this.
	b. Drill / training re	cords available?			$\boxtimes$		Tenant does not keep records for ERP training.
1.5	Employee's trainin	g record available?		$\boxtimes$			Tenant keeps a training record for BPI.
1.6	Any record of pros	ecution / complaint	?		$\boxtimes$		
1.7	Waste Manageme	nt Plan?				$\boxtimes$	Operator's WMP is documented. Tenant follows this.



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				Licence No. WT00004430-2009 valid until 31 July 2014.
2.2	Any wastewater treatment facility prior to effluent discharge?				Oil interceptor & grease trap.
	If yes, facility is properly maintained and function normally?	$\boxtimes$			
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?				As per the discharge licence, self- monitoring shall be performed when required.
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?				
2.4	Surface run-off control measures in place and adequately 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?				



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				
2.9	a. Processes / activities are located under a covered area?				
-	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water.
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Oil replacement (of the heat transmission system) is carried out offsite when needed. This may be needed once every ten years or so.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				
-	b. If yes, oil and grease removed regularly?	$\boxtimes$			
-	c. Collected by licenced collector?				
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	
-	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
	Odour	$\boxtimes$			Yes but the odour was relatively minor.
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				From the gaps of the cover of the Surplus Water with Dregs Storage Tank, the Oil/Water Mixture Storage Tanks during cleaning or transfer of oil to the oil separators, grease trap waste storage tank, uncovered oil buckets and oil stains on ground.
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				Odour is treated by activated carbon. Activated carbon will be replaced every week or when necessary.
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				No dusty materials were found to be used on-site.
	Dust Monitoring			$\boxtimes$	Not required according to the PRC.
3.4	a. Monitoring Record available?				
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?				
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed on-site.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	
	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
	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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				
3.12	Approval from Authority for the use of controlled refrigerant?				
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			Used by all diesel vehicles, fork-lift truck and emergency generator.



# 4. Waste / Chemical Management **Description** Yes No N/A Remarks Registration No. 6311-421-C3617-01 **Chemical Waste Producer Registration** 4.1 completed? for spent lubricating oil and spent mineral oil. 4.2 Provision of sufficient waste disposal points/ $\square$ $\square$ receptacles? Waste disposed of regularly and properly? 2-3 times 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? Sludge is collected by a licensed collector at 4.6 regular intervals? Packaging of Chemical Waste a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\boxtimes$ No spillage. the use of an absorbent? $\square$ $\square$ $\square$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and $\square$ $\square$ $\square$ bilingual? c. Information is accurate and sufficient?



	4. Waste / Chemical Management (contin	ued)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;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?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	No collection.
- 4.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No bulk storage.
-	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				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	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?		$\boxtimes$		Action # 1 and Follow-up Action #1 to 4.
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?				DG licences for storing methanol, sulphuric acid and fatty acid methyl esters (FAME) obtained (Nos. 021229, 021228 & 021227, and 021225 & 021226). DG licence for manufacturing FAME obtained (No. 001456).
	b. Storage area in compliance with the approved plan?	$\boxtimes$			
	c. Storage area(s) has been securely locked?	$\boxtimes$			
	d. Total storage capacity in compliance with the relevant statutory requirement?				
	e. Proper Labelling?	$\boxtimes$			
	f. Dangerous goods properly packaged?	$\boxtimes$			
5.7	Potential stagnant pools cleared and mosquito breeding prevented?				



#### **Action Items from This Audit**

### No. Action

 The oil containers at Lot R1 have been removed by the Tenant. However, some soil surfaces of the lot were found to be oily contaminated. The Tenant should properly clear the contaminated soil as soon as possible. 5 Apr 2012

**Expected By** 



#### **Follow-up from Previous Audits**

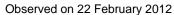
### No. Follow-up from Previous Audit Dated 22 February 2012

Status

 Oil leakage from containers was still observed. The Tenant should replace the damaged containers and clean up the leaked oil as soon as possible.





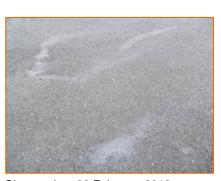




Observed on 21 March 2012

2. No oil stains were observed outside the entrance of the lot which was temporarily borrowed from SGJV.

Closed



Observed on 22 February 2012



Observed on 21 March 2012



#### **Follow-up from Previous Audits**

#### No. Follow-up from Previous Audit Dated 16 January 2012

**Status** 

3. Grease was not observed near the oil water mixture storage tank. Closed





Observed on 22 February 2012

Observed on 21 March 2012

4. Grease was not observed near the oil water mixture storage. Closed







Observed on 22 February 2012

Observed on 21 March 2012

### **Audit Summary and Sign-off**

The site tidiness and oil leakage from damaged containers/barrels have been improved as compared with previous site audits. The Tenant was reminded to clean up outstanding leaked materials and remove broken containers/barrels as well as oil stains in Lot R1 as soon as possible.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Champway	Serco Guardian JV
Signed By	Winnie MA	-	Allen ZHOU	Morgan CHIU
Role	ET Site Auditor	IEC	Managing Director	Park Manager
Signature	Diviso	-	1000	1

Note: \* IEC to sign-off only for a joint ET+IEC Inspection



	Audit Details							
Ten	ant	Champway Tech	nolo	gy Lt	:d			
Date	e & Time	Date 19 April 2	012				Tin	ne 10:20am
Lot	No.	EP07-03						
Aud	lit Ref.	20		_				
IEC	Joint Inspection	Yes	$\boxtimes$	No				
Wea	ather Conditions	Fine	$\boxtimes$	Haz	y			Overcast Rain
Win	ıd	Calm	$\boxtimes$	Ligh	nt Bre	eeze		Strong Wind
Ten	nperature	<u>19</u> °C						
Hun	nidity	Low	$\boxtimes$	Med	lium			High
	1. General							
	Description			,	Yes	No	N/A	Remarks
1.1	EP for Tenant displ	ayed on notice bo	ards	/			$\boxtimes$	EP for EcoPark (EP-226/2005/A) is
	at entrance?							displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?					$\boxtimes$	Operator's Environmental Policy is documented. Tenant follows this.
								documentos. Tenant followe trie.
4.0	Environmental Man	agament Dlan una	lotos	10 			$\square$	
1.3	Environmental Man	iagement Plan upc	alec	a r	Ш	Ш		
1.4	a. Emergency Resp documented?	oonse Plan (ERP)					$\boxtimes$	Operator's ERP is documented. Tenant follows this.
	documented?							Tollows triis.
	b. Drill / training red	ords available?			Ш		Ш	Tenant does not keep records for ERP training.
1.5	Employee's training	record available?	)		$\boxtimes$		$\Box$	Tenant keeps a training record for BPI.
	, .,	,						<b>3</b>
1.6	Any record of prose	ecution / complaint	?			$\boxtimes$		
4 7	Masta Mara a seri	of Diago						Operator's WMD is described
1.7	Waste Managemer	it Plan?			Ш	Ш		Operator's WMP is documented. Tenant follows this.
\								



# 2. Water Quality **Description** Yes No N/A Remarks Valid Effluent Discharge License available? Licence No. WT00004430-2009 valid 2.1 $\square$ $\square$ until 31 July 2014. 2.2 Any wastewater treatment facility prior to Oil interceptor & grease trap. effluent discharge? If yes, facility is properly maintained and function normally? **Effluent Monitoring** As per the discharge licence, selfmonitoring shall be performed when 2.3 a. Sampling / Monitoring Record available? required. b. Monitoring frequency met the license requirement? c. Any exceedance? d. If yes, follow-up action taken? Surface run-off control measures in place 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage system? All manholes are covered? Foam, oil, grease, litter or other 2.7 objectionable matters in water of nearby drain / sewer are avoided? 2.8 Drainage system is well maintained to prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				
2.9	a. Processes / activities are located under a covered area?				
-	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				No contaminated water.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Oil replacement (of the heat transmission system) is carried out offsite when needed. This may be needed once every ten years or so.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				
-	b. If yes, oil and grease removed regularly?	$\boxtimes$			
-	c. Collected by licenced collector?	$\boxtimes$			
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
	Odour	$\boxtimes$			Yes but the odour was relatively minor.
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				From the gaps of the cover of the Surplus Water with Dregs Storage Tank, the Oil/Water Mixture Storage Tanks during cleaning or transfer of oil to the oil separators, grease trap waste storage tank, uncovered oil buckets and oil stains on ground.
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				Odour is treated by activated carbon. Activated carbon will be replaced every week or when necessary.
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				No dusty materials were found to be used on-site.
	Dust Monitoring			$\boxtimes$	Not required according to the PRC.
3.4	a. Monitoring Record available?				
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?				
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed on-site.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
-	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
-	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				
3.12	Approval from Authority for the use of controlled refrigerant?				
-	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?	$\boxtimes$			
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			Used by all diesel vehicles, fork-lift truck and emergency generator.



# 4. Waste / Chemical Management **Description** Yes No N/A Remarks **Chemical Waste Producer Registration** Registration No. 6311-421-C3617-01 4.1 completed? for spent lubricating oil and spent mineral oil. 4.2 Provision of sufficient waste disposal points/ $\square$ $\square$ receptacles? Waste disposed of regularly and properly? 2-3 times a week. 4.4 Sorting of materials on-site for reuse or disposal to designated outlet? Record of quantities of waste generated, 4.5 recycled and disposed properly kept and easily retrieved for inspection? Sludge is collected by a licensed collector at 4.6 regular intervals? Packaging of Chemical Waste a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\boxtimes$ No spillage. the use of an absorbent? $\square$ $\square$ $\square$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and $\square$ $\square$ $\square$ bilingual? c. Information is accurate and sufficient?



	4. Waste / Chemical Management (contin	ued)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;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?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	No collection.
- 4.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No bulk storage.
-	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				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	a. Workers and visitors alerted to possible LGF hazards?				
	b. Smoking and open fires prohibited?			$\boxtimes$	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			$\boxtimes$	
5.3	Good housekeeping?	$\boxtimes$			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?				No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?	$\boxtimes$			DG licences for storing methanol, sulphuric acid and fatty acid methyl esters (FAME) obtained (Nos. 021229, 021228 & 021227, and 021225 & 021226). DG licence for manufacturing FAME obtained (No. 001456).
	b. Storage area in compliance with the approved plan?				
	c. Storage area(s) has been securely locked?	$\boxtimes$			
	d. Total storage capacity in compliance with the relevant statutory requirement?	$\boxtimes$			
	e. Proper Labelling?	$\boxtimes$			
	f. Dangerous goods properly packaged?				
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



#### **Action Items from This Audit**

No. Action Expected By

 An outlet of the odour removal device was found to be collapsed. The Tenant 5 May 2012 should fix the outlet.



#### **Follow-up from Previous Audits**

### No. Follow-up from Previous Audit Dated 21 March 2012

**Status** 

 The oil containers at Lot R1 have been removed. However, some soil surfaces of the lot were found to be oily contaminated. The Tenant should properly clear the contaminated soil as soon as possible.





Observed on 21 March 2012

Observed on 19 April 2012

## No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

Closed

2. Damaged oil containers were removed.





Observed on 22 February 2012

Observed on 19 April 2012



### **Audit Summary and Sign-off**

The site tidiness and oil leakage from damaged containers/barrels have been improved compared with previous site audits. The Tenant should fix the collapsed outlet of an odour removal device.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Champway	Serco Guardian JV
Signed By	Winnie MA	Enid YUNG	Allen ZHOU	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Managing Director	Park Manager
Signature	Division	26:16.	1000	13

Note: \* IEC to sign-off only for a joint ET+IEC Inspection



# **APPENDIX 6-2**

Tenant-specific Audit Checklists for the Reporting Quarter

Shiu Wing Steel Ltd.



	Audit Details						
Ter	nant	Shiu Wing Steel	Limi	ted			
Dat	te & Time	Date 22 Februa	ary 2	012		Tin	ne 9:30am
Lot	No.	EP08-03		_			
Au	dit Ref.	19		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
We	ather Conditions	Fine		Hazy		$\boxtimes$	Overcast Rain
Wii	nd			Light Bro	eeze		Strong Wind
Ter	mperature	<u>19</u> °C					
Hu	midity	Low		Medium		$\boxtimes$	High
	1. General			Vac	Na	NI/A	Remarks
1.1	<b>Description</b> EP for Tenant displ	aved on notice has	arde		NO	N/A	EP for EcoPark (EP-226/2005/A) is
1.1	at entrance?	ayed on holice boo	arus	<b>′</b>			displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?					The Tenant is going to integrate the Environmental Policy into their Safety Operations Manual soon.
1.3	Environmental Mar	nagement Plan upo	latec	i? 🗌			The Tenant is going to integrate the EMP into their Safety Operations Manual soon.
1.4	a. Emergency Responded documented?	oonse Plan (ERP)					The ERP has been included in the Tenant's Safety Operations Manual.
	b. Drill / training red	cords available?					The Tenant advised the training records were kept at their HR department.
1.5	Employee's training	g record available?					The Tenant keeps a training record for BPI.
1.6	Any record of prose	ecution / complaint	?				
1.7	Waste Managemer	nt Plan?					Operator's WMP is documented.



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				No wastewater is generated from the recycling process.
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?				
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?				
2.4	Surface run-off control measures in place and adequately maintained?				
2.5	Surface run-off discharging into drainage system?	$\boxtimes$			
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?				



	Description	Yes	No	N/A	Remarks
9	Processes with high Risk of Contamination  a. Processes / activities are located under a				The risk of contamination for the recycling process is low.
_	covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				No contaminated water was found.
10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				No equipment oil and lubrication replacement were performed inside the tenant lot.
11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
-	b. If yes, oil and grease removed regularly?			$\boxtimes$	
-	c. Collected by licenced collector?				
-	Cargo Handling				Not required.
12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
-	b. Materials and bulk cargo are properly packed?				



	3. Air Quality				
	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?				
3.2	Odour  a. Any odour detected?		$\boxtimes$		
0.2	a. Any ododi detected.				
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?	$\boxtimes$			
3.4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?				
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	
	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				Not yet installed.
3.12	Approval from Authority for the use of controlled refrigerant?			$\boxtimes$	
	b. If yes, record of refrigeration equipment service available?				
3.13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	Not yet installed.
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			



# 4. Waste / Chemical Management **Description** Yes No N/A Remarks Registration No. 3839-421-S3054-02 Chemical Waste Producer Registration 4.1 $\square$ $\square$ completed? for spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ receptacles? Waste disposed of regularly and properly? The municipal waste is disposed of daily via the Operator. 4.4 Sorting of materials on-site for reuse or disposal to designated outlet? Record of quantities of waste generated, 4.5 recycled and disposed properly kept and easily retrieved for inspection? 4.6 Sludge is collected by a licensed collector at regular intervals? Packaging of Chemical Waste $\boxtimes$ No on-site storage. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\sqcap$ $\sqcap$ $\boxtimes$ the use of an absorbent? d. Approval obtained for capacity of $\sqcap$ $\sqcap$ $\boxtimes$ containers > 450L? Labelling of Chemical Waste $\boxtimes$ No on-site storage. a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and bilingual? $\boxtimes$ c. Information is accurate and sufficient?



		red)				
	Description	Yes	No	N/A	Remarks	
9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No on-site storage.	
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$		
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?					
-	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$		
-	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			$\boxtimes$		
-	f. Adequacy of area ventilation?			$\boxtimes$		
-	g. Outdoors storage area should be covered?			$\boxtimes$		
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				No on-site storage.	
-  1	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No on-site storage.	
-	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			$\boxtimes$		
-	c. Walls or partitions of stacked container storage area constructed of impermeable material?			$\boxtimes$		



# 5. Other Issues **Description** Yes No N/A Remarks Landfill Gas Hazard The lot is within the LFG Consultation $\square$ $\square$ Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. 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 Most of the areas are covered by metal recycling processes are concrete paved? plates. 5.5 Valid calibration certificate for any $\boxtimes$ No monitoring equipment. monitoring equipment? Diesel storage was 400L, which is **Dangerous Goods** $\bowtie$ within the exempted quantity of 2,500L 5.6 a. Valid license for manufacturing / storing and so no licence is required. dangerous goods? b. Storage area in compliance with the approved plan? $\boxtimes$ c. Storage area(s) has been securely locked? d. Total storage capacity in compliance with $\boxtimes$ the relevant statutory requirement? $\sqcap$ $\sqcap$ $\boxtimes$ e. Proper Labelling? f. Dangerous goods properly packaged? $\sqcap$ $\sqcap$ $\boxtimes$ Potential stagnant pools cleared and mosquito breeding prevented?



### **Action Items from This Audit**

No. Action Expected by

1. No critical issues were identified. N/A

## **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 16 January 2012 Status

1. Nil. N/A

# **Audit Summary and Sign-off**

No critical issues were identified.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Shiu Wing	Serco Guardian JV
Signed By	Winnie MA	-	Alex WAI	Morgan CHIU
Role	ET Site Auditor	IEC	Manager	Park Manager
Signature	Dishe	-	Xh	13

Note: \* IEC to sign-off only for a joint ET+IEC Inspection



	Audit Details						
Te	nant	Shiu Wing Steel Li	mit	ed			
Da	te & Time	Date 21 March 20	012	2		Tin	ne 9:30am
Lo	t No.	EP08-03		_			
Au	ıdit Ref.	20		_			
IE	C Joint Inspection	☐ Yes [	$\boxtimes$	No			
We	eather Conditions	Fine	$\boxtimes$	Hazy			Overcast Rain
Wi	nd	⊠ Calm	$\boxtimes$	Light Bre	eze		Strong Wind
Те	mperature	<u>19</u> °C					
Hu	ımidity	Low	$\boxtimes$	Medium			High
_	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant displ at entrance?	ayed on notice board	ds .	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Police	cy documented?					The Tenant is going to integrate the Environmental Policy into their Safety Operations Manual soon.
1.3	Environmental Man	agement Plan upda	ted	?	$\boxtimes$		The Tenant is going to integrate the EMP into their Safety Operations Manual soon.
1.4	a. Emergency Resp documented?	oonse Plan (ERP)		$\boxtimes$			The ERP has been included in the Tenant's Safety Operations Manual.
	b. Drill / training rec	ords available?		$\boxtimes$			The Tenant advised the training records were kept at their HR department.
1.5	Employee's training	record available?		$\boxtimes$			The Tenant keeps a training record for BPI.
1.6	Any record of prose	ecution / complaint?			$\boxtimes$		
1.7	Waste Managemen	t Plan?					Operator's WMP is documented.



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				No wastewater is generated from the recycling process.
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?				
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?				
2.4	Surface run-off control measures in place and adequately maintained?				
2.5	Surface run-off discharging into drainage system?				
2.6	All manholes are covered?	$\boxtimes$			
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?	$\boxtimes$			



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
_	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
0	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				No equipment oil and lubrication replacement were performed inside the tenant lot.
1	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
_	b. If yes, oil and grease removed regularly?			$\boxtimes$	
_	c. Collected by licenced collector?				
2	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not required.
-	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality	
	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?	
	Odour	
3.2	a. Any odour detected?	
	b. If yes, can the source be identified?	
	c. Odorous materials are covered?	
	d. If odour control system is installed, is it operating normally?	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?	
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. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	
-	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
-	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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.			$\boxtimes$	Not yet installed.
3.12	Approval from Authority for the use of controlled refrigerant?			$\boxtimes$	
-	b. If yes, record of refrigeration equipment service available?				
3.13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	Not yet installed.
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			



## 4. Waste / Chemical Management **Description** Yes No N/A Remarks **Chemical Waste Producer Registration** Registration No. 3839-421-S3054-02 4.1 $\square$ completed? for spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ $\square$ $\square$ receptacles? 4.3 Waste disposed of regularly and properly? The municipal waste is disposed of daily via the Operator. 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? $\boxtimes$ 4.6 Sludge is collected by a licensed collector at regular intervals? Packaging of Chemical Waste $\boxtimes$ No on-site storage. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\boxtimes$ the use of an absorbent? d. Approval obtained for capacity of $\sqcap$ $\sqcap$ $\boxtimes$ containers > 450L? Labelling of Chemical Waste $\boxtimes$ No on-site storage. a. Label is securely attached, clean and 4.8 visible? $\sqcap$ $\sqcap$ $\boxtimes$ b. Label is in proper dimension and bilingual? c. Information is accurate and sufficient? $\boxtimes$



	4. Waste / Chemical Management (continu	ued)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No on-site storage.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;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?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				No on-site storage.
4.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No on-site storage.
-	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 **Description** Yes No N/A Remarks The lot is within the LFG Consultation Landfill Gas Hazard $\square$ $\square$ $\square$ Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. b. Smoking and open fires prohibited? $\square$ $\square$ 5.2 Security lighting directed downward into the $\boxtimes$ work areas to prevent glare to the surrounding receivers? 5.3 Good housekeeping? Any areas within the lot to be used for $\boxtimes$ Most of the areas are covered by metal recycling processes are concrete paved? plates. 5.5 Valid calibration certificate for any $\Box$ $\boxtimes$ No monitoring equipment. monitoring equipment? Diesel storage was 400L, which is **Dangerous Goods** $\boxtimes$ within the exempted quantity of 2,500L 5.6 a. Valid license for manufacturing / storing and so no licence is required. dangerous goods? b. Storage area in compliance with the approved plan? $\boxtimes$ c. Storage area(s) has been securely locked? d. Total storage capacity in compliance with $\times$ the relevant statutory requirement? e. Proper Labelling? $\sqcap$ $\sqcap$ $\boxtimes$ f. Dangerous goods properly packaged? Potential stagnant pools cleared and mosquito breeding prevented?



#### **Action Items from This Audit**

No. Action Expected by

1. No critical issues were identified. N/A

#### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

1. Nil. N/A

#### **Audit Summary and Sign-off**

No critical issues were identified.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Shiu Wing	Serco Guardian JV
Signed By	Winnie MA	-	Alex WAI	Morgan CHIU
Role	ET Site Auditor	IEC	Manager	Park Manager
Signature	Divers	-	ith	1



	Audit Details						
Ten	ant	Shiu Wing Steel	Limi	ted			
Date	e & Time	Date 19 April 2	012			Tir	me 9:30am
Lot	No.	EP08-03		_			
Aud	lit Ref.	21		_			
IEC	Joint Inspection			No			
Wea	ather Conditions	Fine		Hazy		$\boxtimes$	Overcast Rain
Win	d	Calm	$\boxtimes$	Light B	reeze		Strong Wind
Ten	nperature	20_°C					
Hun	nidity	Low		Mediur	n	$\boxtimes$	High
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant displ at entrance?	ayed on notice boo	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Police	cy documented?			$\boxtimes$		The Tenant is going to integrate the Environmental Policy into their Safety Operations Manual soon.
1.3	Environmental Man	agement Plan upo	lated	<del> </del>  ?	$\boxtimes$		The Tenant is going to integrate the EMP into their Safety Operations Manual soon.
1.4	a. Emergency Resp documented?	oonse Plan (ERP)					The ERP has been included in the Tenant's Safety Operations Manual.
	b. Drill / training red	cords available?		$\boxtimes$			The Tenant advised the training records were kept at their HR department.
1.5	Employee's training	g record available?		$\boxtimes$			The Tenant keeps a training record for BPI.
1.6	Any record of prose	ecution / complaint	?		$\boxtimes$		
1.7	Waste Managemen	nt Plan?				$\boxtimes$	Operator's WMP is documented.
(							



# 2. Water Quality **Description** Yes No N/A Remarks No wastewater is generated from the 2.1 Valid Effluent Discharge License available? recycling process. $\boxtimes$ 2.2 Any wastewater treatment facility prior to effluent discharge? If yes, facility is properly maintained and function normally? **Effluent Monitoring** $\boxtimes$ a. Sampling / Monitoring Record available? b. Monitoring frequency met the license requirement? $\boxtimes$ c. Any exceedance? d. If yes, follow-up action taken? Surface run-off control measures in place 2.4 and adequately maintained? $\square$ $\square$ $\square$ 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? Drainage system is well maintained to prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
9 .	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				No contaminated water was found.
10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				No equipment oil and lubrication replacement were performed inside the tenant lot.
11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
-	b. If yes, oil and grease removed regularly?				
-	c. Collected by licenced collector?				
	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				Not required.
-	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	Description	Yes N	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?				
	Odour		$\boxtimes$		
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?	⊠ [			
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?			$\boxtimes$	
3.6	Open burning is avoided?				



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				
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:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
	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.				Not yet installed.
3.12	Approval from Authority for the use of controlled refrigerant?			$\boxtimes$	
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	Not yet installed.
3.14	Only Ultra-Low Sulphur Diesel is used?				



# 4. Waste / Chemical Management **Description** Yes No N/A Remarks **Chemical Waste Producer Registration** Registration No. 3839-421-S3054-02 4.1 $\square$ completed? for spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ $\square$ $\square$ receptacles? Waste disposed of regularly and properly? The municipal waste is disposed of daily via the Operator. 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? Packaging of Chemical Waste $\boxtimes$ No on-site storage. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? c. Spillage cleaned up immediately through $\boxtimes$ the use of an absorbent? d. Approval obtained for capacity of $\sqcap$ $\sqcap$ $\boxtimes$ containers > 450L? Labelling of Chemical Waste $\boxtimes$ No on-site storage. a. Label is securely attached, clean and 4.8 visible? $\sqcap$ $\sqcap$ $\boxtimes$ b. Label is in proper dimension and bilingual? c. Information is accurate and sufficient? $\boxtimes$



	4. Waste / Chemical Management (continu	ued)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No on-site storage.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;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?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				No on-site storage.
4.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No on-site storage.
-	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 **Description** Yes No N/A Remarks The lot is within the LFG Consultation Landfill Gas Hazard $\square$ $\square$ $\square$ Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. b. Smoking and open fires prohibited? $\square$ $\square$ 5.2 Security lighting directed downward into the $\boxtimes$ work areas to prevent glare to the surrounding receivers? 5.3 Good housekeeping? Any areas within the lot to be used for $\boxtimes$ Most of the areas are covered by metal recycling processes are concrete paved? plates. 5.5 Valid calibration certificate for any $\Box$ $\boxtimes$ No monitoring equipment. monitoring equipment? Diesel storage was 400L, which is **Dangerous Goods** $\boxtimes$ within the exempted quantity of 2,500L 5.6 a. Valid license for manufacturing / storing and so no licence is required. dangerous goods? b. Storage area in compliance with the approved plan? $\boxtimes$ c. Storage area(s) has been securely locked? d. Total storage capacity in compliance with $\times$ the relevant statutory requirement? e. Proper Labelling? $\sqcap$ $\sqcap$ $\boxtimes$ f. Dangerous goods properly packaged? Potential stagnant pools cleared and mosquito breeding prevented?



#### **Action Items from This Audit**

No. Action Expected by

1. No critical issues were identified. N/A

### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 21 March 2012

**S**tatus

1. Nil. N/A

#### **Audit Summary and Sign-off**

No critical issues were identified.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Shiu Wing	Serco Guardian JV
Signed By	Winnie MA	Keith CHAU	Alex WAI	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Manager	Park Manager
Signature	Division	des	Hus	1



# **APPENDIX 6-3**

Tenant-specific Audit Checklists for the Reporting Quarter

Hong Kong Hung Wai Wooden Board Co.



### Audit Details

Ten	ant	Hong Kong Hun	g Wa	i Wooden Bo	ard	Compan	y .
Dat	e & Time	Date 22 Februa	ary 2	012		Time	10:30am
Lot	No.	EP06-034		_			
Aud	dit Ref.	18		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
Wea	ather Conditions	Fine		Hazy		⊠ Ove	ercast Rain
Win	nd	⊠ Calm		Light Breeze	Э	Stro	ong Wind
Ten	nperature	<u>19</u> °C					
Hur	nidity	Low		Medium		⊠ Hig	h
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant disp at entrance?	layed on notice bo	ards				EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?					Operator's Environmental Policy is documented. Tenant follows this.
1.3	Environmental Mar	nagement Plan upo	dated	i? 🔲			
1.4	a. Emergency Res documented?	ponse Plan (ERP)				$\boxtimes$	Operator's ERP is documented. Tenant follows this.
	b. Drill / training red	cords available?					Training has been provided but the records are not available.
1.5	Employee's training	g record available	?			$\boxtimes$	Training has been provided but the records are not available.
1.6	Any record of prose	ecution / complain	t?		$\boxtimes$		
1.7	Waste Managemen	nt Plan?					Operator's WMP is documented. Tenant follows this.
(							



	Description	Yes	No	N/A	Remarks
1	Valid Effluent Discharge License available?				No wastewater is generated fro the recycling process.
2	Any wastewater treatment facility prior to effluent discharge?			$\boxtimes$	
	If yes, facility is properly maintained and function normally?				
,	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	
	b. Monitoring frequency met the license requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
	Surface run-off control measures in place and adequately maintained?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Surface run-off discharging into drainage system?				Not observed since the gate of the lot was closed.
	All manholes are covered?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Drainage system is well maintained to prevent flooding and overflow?			$\boxtimes$	Not observed since the gate of the lot was closed.



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	Not observed since the gate of the lot was closed.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed since the gate of the lot was closed.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?			$\boxtimes$	
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not required.
•	b. Materials and bulk cargo are properly packed?				



	3. Air Quality				
	Description	Yes	No	N/A	Remarks
.1	a. Valid Specified Process License for all specified process available?				Not required.
	b. SP License conditions / monitoring requirements met?			$\boxtimes$	
.2	Odour a. Any odour detected?				
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				Not observed since the gate of the lot was closed.
.4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
.5	Enclosures are provided around the main dust-generating activities?				Not observed since the gate of the lot was closed.



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?				Not observed since the gate of the lot was closed.
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				The collected dust was the input material of the recycling process.
3.12	Approval from Authority for the use of controlled refrigerant?				
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.14	Only Ultra-Low Sulphur Diesel is used?			$\boxtimes$	Not observed since the gate of the lot was closed.



4	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
	Chemical Waste Producer Registration completed?				Not required.
	Provision of sufficient waste disposal points/receptacles?			$\boxtimes$	Not observed since the gate of the lot was closed.
•	Waste disposed of regularly and properly?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Sorting of materials on-site for reuse or disposal to designated outlet?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	$\boxtimes$			
	Sludge is collected by a licensed collector at regular intervals?			$\boxtimes$	
•	Packaging of Chemical Waste a. Stored in suitable container?			$\boxtimes$	Not observed since the gate of the lot was closed.
٠	b. Container properly closed or sealed?			$\boxtimes$	
	c. Spillage cleaned up immediately through the use of an absorbent?			$\boxtimes$	
	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
•	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	Not observed since the gate of the lot was closed.
	b. Label is in proper dimension and bilingual?				
	c. Information is accurate and sufficient?			$\boxtimes$	



	Description	Yes	No	N/A	Remarks
)	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed since the gate of the lot was closed.
_	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
_	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?			$\boxtimes$	
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$	
-	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			$\boxtimes$	
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?				
)	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	Not observed since the gate of the lot was closed.
-	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?				Not observed since the gate of the lot was closed.
-	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			$\boxtimes$	
-	c. Walls or partitions of stacked container storage area constructed of impermeable material?				



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	a. Workers and visitors alerted to possible LGF hazards?				
	b. Smoking and open fires prohibited?			$\boxtimes$	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?				
5.3	Good housekeeping?				Not observed since the gate of the lot was closed.
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?				No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	d. Total storage capacity in compliance with the relevant statutory requirement?			$\boxtimes$	
	e. Proper Labelling?			$\boxtimes$	
	f. Dangerous goods properly packaged?				
5.7	Potential stagnant pools cleared and mosquito breeding prevented?			$\boxtimes$	Not observed since the gate of the lot was closed.



#### **Action Items from This Audit**

No. Action Expected By

1. No critical issues were identified.

N/A



#### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 16 January 2012

**Status** 

1. Nil. N/A

### **Audit Summary and Sign-off**

No critical issues were observed since the Tenant's operation was temporarily suspended.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Hung Wai	Serco Guardian JV
Signed By	Winnie MA	Vinnie MA -		Morgan CHIU
Role	ET Site Auditor	IEC	Assistant General Manager	Park Manager
Signature	Winds	-		1

1. General

1.1

1.

1.6



Audit Details					
Tenant	Hong Kong H	ung Wai Wooden	Board Compa	ny	
Date & Time	Date 21 Mar	rch 2012	Time	10:30am	
Lot No.	EP06-034				
Audit Ref.	19				
IEC Joint Inspection	Yes	⊠ No			

IEC Joint Inspection	Yes	⊠ No		
<b>Weather Conditions</b>	Fine		Overcast	Rain
Wind	Calm		☐ Strong Wind	
Temperature	<u>19</u> °C			
Humidity	Low		High	

Description	Yes	No	N/A	Remarks
EP for Tenant displayed on notice boards / at entrance?			$\boxtimes$	EP for Eco

	is displayed at the entrance of EcoPark. EP for Tenant is not required.

	.2	Environmental Policy documented?				Operator's Environmental Policy is documented. Tenant follows this.
--	----	----------------------------------	--	--	--	---

1.3 Environr	nental Management Plan updated?			$\boxtimes$
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.4	a. Emergency Response Plan (ERP) documented?		Operator's ERP is documented. Tenant follows this.

b. Drill / training records available?			$\boxtimes$	Training has been provided but the records are not available.
--	--	--	-------------	---

1.5	Employee's training record available?		Training has been provided but the records are not available.

1.7	Waste Management Plan?		$\boxtimes$	Operator's WMP is documented.

Tenant follows this.

 $\boxtimes$ 

Any record of prosecution / complaint?



	Description	Yes	No	N/A	Remarks
	Valid Effluent Discharge License available?				No wastewater is generated from the recycling process.
<u> </u>	Any wastewater treatment facility prior to effluent discharge?			$\boxtimes$	
	If yes, facility is properly maintained and function normally?				
	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	
	b. Monitoring frequency met the license requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
	Surface run-off control measures in place and adequately maintained?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Surface run-off discharging into drainage system?			$\boxtimes$	Not observed since the gate of the lot was closed.
	All manholes are covered?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Drainage system is well maintained to prevent flooding and overflow?			$\boxtimes$	Not observed since the gate of the lot was closed.



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
•	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				Not observed since the gate of the lot was closed.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed since the gate of the lot was closed.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
	b. If yes, oil and grease removed regularly?			$\boxtimes$	
•	c. Collected by licenced collector?				
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				Not required.
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	Description	Yes	No	N/A	Remarks
.1	a. Valid Specified Process License for all specified process available?				Not required.
	b. SP License conditions / monitoring requirements met?			$\boxtimes$	
.2	Odour a. Any odour detected?		$\boxtimes$		
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			$\boxtimes$	Not observed since the gate of the lot was closed.
4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
5	Enclosures are provided around the main dust-generating activities?				Not observed since the gate of the lot was closed.



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	
	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				The collected dust was the input material of the recycling process.
3.12	Approval from Authority for the use of controlled refrigerant?				
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.14	Only Ultra-Low Sulphur Diesel is used?			$\boxtimes$	Not observed since the gate of the lot was closed.



	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
1	Chemical Waste Producer Registration completed?				Not required.
2	Provision of sufficient waste disposal points/receptacles?			$\boxtimes$	Not observed since the gate of the lot was closed.
3	Waste disposed of regularly and properly?			$\boxtimes$	Not observed since the gate of the lot was closed.
4	Sorting of materials on-site for reuse or disposal to designated outlet?			$\boxtimes$	Not observed since the gate of the lot was closed.
5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	$\boxtimes$			
6	Sludge is collected by a licensed collector at regular intervals?			$\boxtimes$	
7	Packaging of Chemical Waste a. Stored in suitable container?			$\boxtimes$	Not observed since the gate of the lot was closed.
	b. Container properly closed or sealed?			$\boxtimes$	
	c. Spillage cleaned up immediately through the use of an absorbent?			$\boxtimes$	
	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
3	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	Not observed since the gate of the lot was closed.
	b. Label is in proper dimension and bilingual?			$\boxtimes$	
	c. Information is accurate and sufficient?				



	Description	Yes	No	N/A	Remarks
)	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed since the gate of the lot was closed.
-	b. Incompatible wastes separated by an impermeable partition?				
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity</i> <50L) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity</i> >50L)?			$\boxtimes$	
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$	
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			$\boxtimes$	
	f. Adequacy of area ventilation?			$\boxtimes$	
	g. Outdoors storage area should be covered?				
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	Not observed since the gate of the lot was closed.
1	Storage of Liquid Waste a. Storage area floor/surface permeation-proof?			$\boxtimes$	Not observed since the gate of the lot was closed.
-	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	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?			$\boxtimes$	Not observed since the gate of the lot was closed.
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?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?				There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	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?				Not observed since the gate of the lot was closed.



**Expected By** 

N/A

#### **Action Items from This Audit**

No. Action

1. No critical issues were identified.



#### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

Nil. N/A

# **Audit Summary and Sign-off**

1.

No critical issues were observed since the Tenant's operation was temporarily suspended.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Hung Wai	Serco Guardian JV
Signed By	Winnie MA	-	William WONG	Morgan CHIU
Role	ET Site Auditor	IEC	Assistant General Manager	Park Manager
Signature	Wine	-		1



#### **Audit Details Tenant** Hong Kong Hung Wai Wooden Board Company **Date & Time Date** 19 April 2012 **Time** 9:30am Lot No. EP06-034 Audit Ref. 20 No **IEC Joint Inspection Weather Conditions** Fine Hazy ○ Overcast Rain Wind Calm Strong Wind 20 °C **Temperature Humidity** Low Medium 1. General **Description** No N/A **Remarks** Yes EP for Tenant displayed on notice boards / $\boxtimes$ EP for EcoPark (EP-226/2005/A) 1.1 at entrance? is displayed at the entrance of EcoPark. EP for Tenant is not required. 1.2 Environmental Policy documented? $\boxtimes$ Operator's Environmental Policy is documented. Tenant follows this **Environmental Management Plan updated?** $\boxtimes$ 1.3 a. Emergency Response Plan (ERP) $\boxtimes$ Operator's ERP is documented. 1.4 documented? Tenant follows this. b. Drill / training records available? $\boxtimes$ Training has been provided but the records are not available. $\boxtimes$ Employee's training record available? Training has been provided but 1.5 the records are not available.

 $\Box$ 

 $\boxtimes$ 

 $\Box$ 

 $\boxtimes$ 

Any record of prosecution / complaint?

Waste Management Plan?

1.6

Operator's WMP is documented.

Tenant follows this.



	Description	Yes	No	N/A	Remarks
	Valid Effluent Discharge License available?				No wastewater is generated from the recycling process.
<u> </u>	Any wastewater treatment facility prior to effluent discharge?			$\boxtimes$	
	If yes, facility is properly maintained and function normally?				
	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	
	b. Monitoring frequency met the license requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
_	Surface run-off control measures in place and adequately maintained?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Surface run-off discharging into drainage system?			$\boxtimes$	Not observed since the gate of the lot was closed.
	All manholes are covered?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?			$\boxtimes$	Not observed since the gate of the lot was closed.
	Drainage system is well maintained to prevent flooding and overflow?			$\boxtimes$	Not observed since the gate of the lot was closed.



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
2.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	Not observed since the gate of the lot was closed.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed since the gate of the lot was closed.
2.11	a. Oil interceptor provided for drainage discharging from maintenance area?			$\boxtimes$	Not required.
•	b. If yes, oil and grease removed regularly?				
•	c. Collected by licenced collector?			$\boxtimes$	
•	Cargo Handling			$\boxtimes$	Not required.
.12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
3.2	Odour a. Any odour detected?		$\boxtimes$		
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.4	Dust Monitoring a. Monitoring Record available?				Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?				Not observed since the gate of the lot was closed.
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
	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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.				The collected dust was the input material of the recycling process.
3.12	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?			$\boxtimes$	Not observed since the gate of the lot was closed.
3.14	Only Ultra-Low Sulphur Diesel is used?			$\boxtimes$	Not observed since the gate of the lot was closed.



4.1 - 4.2	<b>Description</b> Chemical Waste Producer Registration completed?	Yes	No	N/A	Remarks
_					
- 4.2					Not required.
	Provision of sufficient waste disposal points/ receptacles?			$\boxtimes$	Not observed since the gate of the lot was closed.
4.3	Waste disposed of regularly and properly?			$\boxtimes$	Not observed since the gate of the lot was closed.
- 4.4	Sorting of materials on-site for reuse or disposal to designated outlet?				Not observed since the gate of the lot was closed.
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	$\boxtimes$			
- 4.6	Sludge is collected by a licensed collector at regular intervals?			$\boxtimes$	
- 4.7	Packaging of Chemical Waste a. Stored in suitable container?				Not observed since the gate of the lot was closed.
_	b. Container properly closed or sealed?			$\boxtimes$	
_	c. Spillage cleaned up immediately through the use of an absorbent?			$\boxtimes$	
_	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
- 4.8	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	Not observed since the gate of the lot was closed.
_	b. Label is in proper dimension and bilingual?				
-	c. Information is accurate and sufficient?			$\boxtimes$	



	Description	Yes	No	N/A	Remarks
)	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				Not observed since the gate of the lot was closed.
-	b. Incompatible wastes separated by an impermeable partition?				
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity</i> <50L) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity</i> >50L)?			$\boxtimes$	
-	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$	
-	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	Not observed since the gate of the lot was closed.
1	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	Not observed since the gate of the lot was closed.
-	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			$\boxtimes$	
-	c. Walls or partitions of stacked container storage area constructed of impermeable material?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	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?			$\boxtimes$	Not observed since the gate of the lot was closed.
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?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?				There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	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?				Not observed since the gate of the lot was closed.



N/A

### **Action Items from This Audit**

No. Action Expected By

1. No critical issues were identified.



### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 21 March 2012

**Status** 

Nil. N/A

# **Audit Summary and Sign-off**

1.

No critical issues were observed since the Tenant's operation is temporarily suspended.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Hung Wai	Serco Guardian JV
Signed By	Winnie MA	Keith CHAU	William WONG	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Assistant General Manager	Park Manager
Signature	Divis	des		1



# **APPENDIX 6-4**

Tenant-specific Audit Checklists for the Reporting Quarter

Li Tong Group



#### Audit Details

Ten	ant	Li Tong Group					
Date	e & Time	Date 22 Febru	ary 2	012		Time	10:00am
Lot	No.	EP07-02		_			
Aud	lit Ref.	17		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
Wea	ather Conditions	Fine		Hazy		⊠ Ove	ercast Rain
Win	d	⊠ Calm		Light Breeze	Э	Stro	ong Wind
Ten	nperature	<u>19</u> °C					
Hun	nidity	Low		Medium		⊠ Hig	h
	1. General  Description			Yes	No	N/A	Remarks
1.1	EP for Tenant disp at entrance?	layed on notice bo	ards				EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?		$\boxtimes$			The Tenant's Environmental Policy is documented.
1.3	Environmental Mar	nagement Plan up	dated	l? 🔀			The Tenant's EMP is documented.
1.4	a. Emergency Res documented?	ponse Plan (ERP)					The Tenant's ERP is documented.
	b. Drill / training red	cords available?					
1.5	Employee's training	g record available'	?	$\boxtimes$			
1.6	Any record of pros	ecution / complain	t?		$\boxtimes$		
1.7	Waste Managemen	nt Plan?					The Tenant's WMP is documented.



#### 2. Water Quality **Description** Yes No Remarks N/A 2.1 Valid Effluent Discharge License available? $\boxtimes$ Licence No. WT00007957-2010 valid until 31 Dec 2015. 2.2 Any wastewater treatment facility prior to $\boxtimes$ Not required for domestic effluent discharge? wastewater. If yes, facility is properly maintained and $\boxtimes$ A chemical/container toilet is function normally? maintained on a monthly basis. $\boxtimes$ As per the discharge licence, **Effluent Monitoring** self-monitoring shall be 2.3 a. Sampling / Monitoring Record available? performed when required. b. Monitoring frequency met the license П $\boxtimes$ requirement? $\boxtimes$ c. Any exceedance? $\boxtimes$ d. If yes, follow-up action taken? Surface run-off control measures in place $\boxtimes$ 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage $\boxtimes$ system? $\boxtimes$ 2.6 All manholes are covered? Foam, oil, grease, litter or other $\boxtimes$ 2.7 objectionable matters in water of nearby drain / sewer are avoided? $\boxtimes$ 2.8 Drainage system is well maintained to prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
•	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not required.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
•	b. If yes, oil and grease removed regularly?				
•	c. Collected by licenced collector?				
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				Not required.
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
3.2	Odour a. Any odour detected?		$\boxtimes$		
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				
3.4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?				
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
3.12	Approval from Authority for the use of controlled refrigerant?				Not required.
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?	$\boxtimes$			
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			



#### 4. Waste / Chemical Management **Description** Yes No N/A Remarks Chemical Waste Producer Registration 4.1 $\boxtimes$ Registration No. 3840-421completed? L2676-01 for various types of chemical waste. Provision of sufficient waste disposal points/ $\boxtimes$ 4.2 receptacles? Waste disposed of regularly and properly? $\bowtie$ The municipal waste is disposed of daily via the Operator, whereas the chemical waste is disposed of once or twice per month depending on the quantity generated. Sorting of materials on-site for reuse or $\boxtimes$ Recyclable materials were 4.4 disposal to designated outlet? passed to other recyclers. 4.5 Record of quantities of waste generated, $\bowtie$ recycled and disposed properly kept and easily retrieved for inspection? Sludge is collected by a licensed collector at $\boxtimes$ 4.6 regular intervals? Packaging of Chemical Waste $\boxtimes$ 4.7 a. Stored in suitable container? b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\boxtimes$ No spillage. the use of an absorbent? $\boxtimes$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and $\boxtimes$ bilingual? $\boxtimes$ c. Information is accurate and sufficient?



	4. Waste / Chemical Management (continu	ıed)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				
	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?				
•	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?	$\boxtimes$			
•	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				See Action #1.
	f. Adequacy of area ventilation?				
	g. Outdoors storage area should be covered?				Chemical waste was stored indoor.
1.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)	$\boxtimes$			The Tenant itself is a licensed chemical waste collector (Licence No.: 3810-421-L2676-OS) for CRT and LCD monitors.
l.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?	$\boxtimes$			
	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				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)				Outside the LFG Consultation Zone.
5.1	a. Workers and visitors alerted to possible LGF hazards?				
	b. Smoking and open fires prohibited?				
.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			$\boxtimes$	
5.3	Good housekeeping?				
i.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
.5	Valid calibration certificate for any monitoring equipment?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	d. Total storage capacity in compliance with the relevant statutory requirement?			$\boxtimes$	
	e. Proper Labelling?			$\boxtimes$	
	f. Dangerous goods properly packaged?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



# **Action Items from This Audit**

No. Action Expected By

1. No critical environmental issue was observed.

Nil

# **Follow-up from Previous Audits**

# No. Follow-up from Previous Audit Dated 16 January 2012

Status

1. Non-chemical waste was not observed in chemical waste storage area.

Closed



### **Audit Summary and Sign-off**

No critical environmental issue was observed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Li Tong	Serco Guardian JV
Signed By	Winnie MA	-	Teresa HO	Morgan CHIU
Role	ET Site Auditor	IEC	Environmental Health and Safety Officer	Park Manager
Signature	Dies	-		13



# Audit Details

Ten	ant	Li Tong Group					
Date	e & Time	Date 21 March	201	2		Time	10:00am
Lot	No.	EP07-02		_			
Auc	lit Ref.	18		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
Wea	ather Conditions	Fine	$\boxtimes$	Hazy		Ove	ercast Rain
Win	d	Calm	$\boxtimes$	Light Breeze	Э	Stro	ong Wind
Ten	nperature	<u>19</u> °C					
Hun	nidity	Low	$\boxtimes$	Medium		Higl	1
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant displ at entrance?	ayed on notice bo	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?					The Tenant's Environmental Policy is documented.
1.3	Environmental Man	agement Plan upo	dated	l? 🖂			The Tenant's EMP is documented.
1.4	a. Emergency Resp documented?	oonse Plan (ERP)		$\boxtimes$			The Tenant's ERP is documented.
	b. Drill / training rec	cords available?		$\boxtimes$			
1.5	Employee's training	g record available?	,				
1.6	Any record of prose	ecution / complaint	?		$\boxtimes$		
1.7	Waste Managemer	nt Plan?					The Tenant's WMP is documented.
\							



### 2. Water Quality **Description** Yes No N/A **Remarks** 2.1 Valid Effluent Discharge License available? $\bowtie$ Licence No. WT00007957-2010 valid until 31 Dec 2015. 2.2 Any wastewater treatment facility prior to $\boxtimes$ Not required for domestic effluent discharge? wastewater. If yes, facility is properly maintained and $\boxtimes$ A chemical/container toilet is function normally? maintained on a monthly basis. $\boxtimes$ **Effluent Monitoring** As per the discharge licence, self-monitoring shall be 2.3 a. Sampling / Monitoring Record available? performed when required. b. Monitoring frequency met the license П $\boxtimes$ requirement? $\boxtimes$ c. Any exceedance? $\boxtimes$ d. If yes, follow-up action taken? Surface run-off control measures in place $\boxtimes$ 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage $\boxtimes$ system? $\boxtimes$ $\Box$ 2.6 All manholes are covered? $\boxtimes$ 2.7 Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided? $\boxtimes$ 2.8 Drainage system is well maintained to prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
•	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not required.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?			$\boxtimes$	
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not required.
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?			$\boxtimes$	
	Odour				
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?			$\boxtimes$	
3.4	Dust Monitoring a. Monitoring Record available?				Not required.
	b. Monitoring frequency met the requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?				
3.6	Open burning is avoided?	$\boxtimes$			



### 3. Air Quality (continued) **Description** Yes No N/A **Remarks** 3.7 Dark smoke emitted from chimney or $\boxtimes$ There is no chimney installed onpowered plant is avoided? site. Vehicles and equipment are switched off $\boxtimes$ 3.8 while not in use? 3.9 Approval certificate issued by the Authority $\Box$ $\boxtimes$ is available for furnace, oven or chimney consuming: a. >25L of conventional liquid fuel per hour b. >35kg of conventional solid fuel per hour $\boxtimes$ c. >1,150 MJ of any gaseous fuel per hour $\boxtimes$ $\boxtimes$ 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 $\boxtimes$ equipment installed by tenants must be tested to ensure compliance for landfill disposal. $\Box$ 3.12 a. Approval from Authority for the use of $\boxtimes$ Not required. controlled refrigerant? $\boxtimes$ b. If yes, record of refrigeration equipment service available? 3.13 All air pollution control systems are properly $\boxtimes$ maintained and function normally? 3.14 Only Ultra-Low Sulphur Diesel is used? $\boxtimes$



#### 4. Waste / Chemical Management **Description** Yes No N/A **Remarks Chemical Waste Producer Registration** 4.1 $\boxtimes$ Registration No. 3840-421completed? L2676-01 for various types of chemical waste. 4.2 Provision of sufficient waste disposal points/ $\boxtimes$ $\Box$ receptacles? Waste disposed of regularly and properly? $\boxtimes$ The municipal waste is disposed of daily via the Operator, whereas the chemical waste is disposed of once or twice per month depending on the quantity generated. Sorting of materials on-site for reuse or $\boxtimes$ $\Box$ Recyclable materials were 4.4 disposal to designated outlet? passed to other recyclers. Record of quantities of waste generated, $\boxtimes$ 4.5 recycled and disposed properly kept and easily retrieved for inspection? Sludge is collected by a licensed collector at $\boxtimes$ 4.6 regular intervals? Packaging of Chemical Waste $\boxtimes$ $\Box$ 4.7 a. Stored in suitable container? b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\Box$ $\boxtimes$ No spillage. the use of an absorbent? $\boxtimes$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ a. Label is securely attached, clean and 4.8 visible? $\boxtimes$ b. Label is in proper dimension and bilingual? $\boxtimes$ c. Information is accurate and sufficient?



	Description	Yes	No	N/A	Remarks
			NO	N/A	Remarks
.9	<ul><li>Storage of Chemical Waste</li><li>a. Proper "Chemical Waste" signs are displayed?</li></ul>				
	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
,	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?	$\boxtimes$			
•	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?	$\boxtimes$			
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				See Action #1.
,	f. Adequacy of area ventilation?	$\boxtimes$			
	g. Outdoors storage area should be covered?			$\boxtimes$	Chemical waste was stored indoor.
.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				The Tenant itself is a licensed chemical waste collector (Licence No.: 3810-421-L2676-OS) for CRT and LCD monitors.
.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?	$\boxtimes$			
	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?	$\boxtimes$			



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	a. Workers and visitors alerted to possible LGF hazards?				
	b. Smoking and open fires prohibited?			$\boxtimes$	
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			$\boxtimes$	
5.3	Good housekeeping?	$\boxtimes$			
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?				No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	d. Total storage capacity in compliance with the relevant statutory requirement?			$\boxtimes$	
	e. Proper Labelling?			$\boxtimes$	
	f. Dangerous goods properly packaged?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



### **Action Items from This Audit**

No. Action Expected By

1. No critical environmental issue was observed.

Nil

### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

1. Nil

N/A

### **Audit Summary and Sign-off**

No critical environmental issue was observed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Li Tong	Serco Guardian JV
Signed By	Winnie MA	-	Teresa HO	Morgan CHIU
Role	ET Site Auditor	IEC	Environmental Health and Safety Officer	Park Manager
Signature	Distre	-	R	1



# Audit Details

Ten	ant	Li Tong Group					
Dat	e & Time	Date 19 April 2	012			Time	9:40am
Lot	No.	EP07-02		_			
Auc	dit Ref.	19		_			
IEC	Joint Inspection			No			
Wea	ather Conditions	Fine		Hazy		⊠ Ove	ercast Rain
Win	nd	Calm	$\boxtimes$	Light Bree	ze	Stro	ong Wind
Ten	nperature	<u>20</u> °C					
Hur	midity	Low		Medium		⊠ Hig	h
	1. General						
<b>,</b>	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant disp at entrance?	layed on notice bo	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Poli	cy documented?					The Tenant's Environmental Policy is documented.
1.3	Environmental Mar	nagement Plan upo	dated	? 🔀			The Tenant's EMP is documented.
1.4	a. Emergency Residocumented?	ponse Plan (ERP)					The Tenant's ERP is documented.
	b. Drill / training red	cords available?					
1.5	Employee's training	g record available?	?				
1.6	Any record of proso	ecution / complaint	1?				
1.7	Waste Managemen	nt Plan?					The Tenant's WMP is documented.



### 2. Water Quality **Description** Yes No N/A **Remarks** 2.1 Valid Effluent Discharge License available? $\bowtie$ Licence No. WT00007957-2010 valid until 31 Dec 2015. 2.2 Any wastewater treatment facility prior to $\boxtimes$ Not required for domestic effluent discharge? wastewater. If yes, facility is properly maintained and $\boxtimes$ A chemical/container toilet is function normally? maintained on a monthly basis. $\boxtimes$ **Effluent Monitoring** As per the discharge licence, self-monitoring shall be 2.3 a. Sampling / Monitoring Record available? performed when required. b. Monitoring frequency met the license П $\boxtimes$ requirement? $\boxtimes$ c. Any exceedance? $\boxtimes$ d. If yes, follow-up action taken? Surface run-off control measures in place $\boxtimes$ 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage $\boxtimes$ system? $\boxtimes$ $\Box$ 2.6 All manholes are covered? $\boxtimes$ 2.7 Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided? $\boxtimes$ 2.8 Drainage system is well maintained to prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
•	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not required.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?			$\boxtimes$	
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not required.
•	b. Materials and bulk cargo are properly packed?				



	3. Air Quality				
	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?				
	Odour				
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				
3.4	Dust Monitoring  a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?				
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



### 3. Air Quality (continued) **Description** Yes No N/A **Remarks** 3.7 Dark smoke emitted from chimney or $\boxtimes$ There is no chimney installed onpowered plant is avoided? site. Vehicles and equipment are switched off $\boxtimes$ 3.8 while not in use? 3.9 Approval certificate issued by the Authority $\Box$ $\boxtimes$ is available for furnace, oven or chimney consuming: a. >25L of conventional liquid fuel per hour b. >35kg of conventional solid fuel per hour $\boxtimes$ c. >1,150 MJ of any gaseous fuel per hour $\Box$ $\boxtimes$ $\boxtimes$ 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 $\boxtimes$ equipment installed by tenants must be tested to ensure compliance for landfill disposal. $\Box$ $\boxtimes$ 3.12 a. Approval from Authority for the use of Not required. controlled refrigerant? $\boxtimes$ b. If yes, record of refrigeration equipment service available? 3.13 All air pollution control systems are properly $\boxtimes$ maintained and function normally? 3.14 Only Ultra-Low Sulphur Diesel is used? $\boxtimes$



#### 4. Waste / Chemical Management **Description** Yes No N/A **Remarks Chemical Waste Producer Registration** 4.1 $\boxtimes$ Registration No. 3840-421completed? L2676-01 for various types of chemical waste. Provision of sufficient waste disposal points/ $\boxtimes$ 4.2 $\Box$ receptacles? Waste disposed of regularly and properly? $\boxtimes$ $\Box$ The municipal waste is disposed of daily via the Operator, whereas the chemical waste is disposed of once or twice per month depending on the quantity generated. Recyclable materials were Sorting of materials on-site for reuse or $\boxtimes$ $\Box$ 4.4 disposal to designated outlet? passed to other recyclers. Record of quantities of waste generated, $\boxtimes$ 4.5 recycled and disposed properly kept and easily retrieved for inspection? Sludge is collected by a licensed collector at $\boxtimes$ 4.6 regular intervals? Packaging of Chemical Waste $\boxtimes$ $\Box$ 4.7 a. Stored in suitable container? b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\Box$ $\boxtimes$ No spillage. the use of an absorbent? $\boxtimes$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ a. Label is securely attached, clean and 4.8 visible? $\boxtimes$ b. Label is in proper dimension and bilingual? $\boxtimes$ c. Information is accurate and sufficient?



	Description	Yes	No	N/A	Remarks
			NO	N/A	Remarks
.9	<ul><li>Storage of Chemical Waste</li><li>a. Proper "Chemical Waste" signs are displayed?</li></ul>				
	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
,	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?	$\boxtimes$			
•	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?	$\boxtimes$			
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				See Action #1.
,	f. Adequacy of area ventilation?	$\boxtimes$			
	g. Outdoors storage area should be covered?			$\boxtimes$	Chemical waste was stored indoor.
.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				The Tenant itself is a licensed chemical waste collector (Licence No.: 3810-421-L2676-OS) for CRT and LCD monitors.
.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?	$\boxtimes$			
	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?	$\boxtimes$			



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
	Landfill Gas Hazard (within LFG Consultation Zone)			$\boxtimes$	Outside the LFG Consultation Zone.
5.1	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?	$\boxtimes$			
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?				No monitoring equipment.
5.6	Dangerous Goods a. Valid license for manufacturing / storing dangerous goods?				There were no DGs stored on site.
	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?			$\boxtimes$	
	f. Dangerous goods properly packaged?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



### **Action Items from This Audit**

No. Action Expected By

1. No critical environmental issue was observed.

Nil

### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 21 March 2012

**Status** 

1. Nil

N/A

### **Audit Summary and Sign-off**

No critical environmental issue was observed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Li Tong	Serco Guardian JV
Signed By	Winnie MA	Enid YUNG	Teresa HO	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Environmental Health and Safety Officer	Park Manager
Signature	Diviso	20:16		13



# **APPENDIX 6-5**

Tenant-specific Audit Checklists for the Reporting Quarter

Hong Kong Telford Envirotech Group Ltd.



	Audit Details								
Tenant		Hong Kong Telford Envirotech Group Ltd.							
Date & Time		Date 22 February 2012				Time	11:20am		
Lot No.		EP08-01		_					
Audit Ref.		4		_					
IEC Joint Inspection		Yes		No					
Weather Conditions		Fine		Hazy		⊠ Ove	ercast Rain		
Wind			Calm Light Breeze		ze	☐ Strong Wind			
Temperature		<u>19</u> °C							
Humidity		Low	Medium			High			
1.1	1. General  Description  EP for Tenant displat entrance?  Environmental Police  Environmental Man	cy documented?			No .	N/A	Remarks  EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.		
1.4	a. Emergency Resp documented?	ponse Plan (ERP)							
_	b. Drill / training rec	ords available?							
1.5	Employee's training	record available?	)						
1.6	Any record of prose	ecution / complaint	:?						
1.7	Waste Managemen	t Plan?							



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				
2.2	Any wastewater treatment facility prior to effluent discharge?		$\boxtimes$		
	If yes, facility is properly maintained and function normally?			$\boxtimes$	
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?				
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
2.4	Surface run-off control measures in place and adequately maintained?				
2.5	Surface run-off discharging into drainage system?				
2.6	All manholes are covered?	$\boxtimes$			
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	$\boxtimes$			
2.8	Drainage system is well maintained to prevent flooding and overflow?	$\boxtimes$			
					,



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			For the majority of the processes / activities.
.9	Processes / activities are located under a covered area?				
•	b. Stop-logs installed in the perimeter drainage system for uncovered areas?		$\boxtimes$		Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				
10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed.
11	a. Oil interceptor provided for drainage discharging from maintenance area?				Maintenance area was not observed.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?				
	Cargo Handling			$\boxtimes$	Not applicable.
12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
	Odour				
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				
3.4	Dust Monitoring  a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?				
3.5	Enclosures are provided around the main dust-generating activities?				
3.6	Open burning is avoided?	$\boxtimes$			



_	Description	Yes	No	N/A	Remarks
.7	Dark smoke emitted from chimney or powered plant is avoided?				
.8	Vehicles and equipment are switched off while not in use?				
9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	Not required.
	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			$\boxtimes$	Not required.
10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?			$\boxtimes$	Not required.
11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
12	Approval from Authority for the use of controlled refrigerant?			$\boxtimes$	Not required.
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
13	All air pollution control systems are properly maintained and function normally?			$\boxtimes$	



	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			$\boxtimes$	To be determined during the next Monthly Site Audit.
4.2	Provision of sufficient waste disposal points/receptacles?				
4.3	Waste disposed of regularly and properly?	$\boxtimes$			
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?	$\boxtimes$			
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	$\boxtimes$			
4.6	Sludge is collected by a licensed collector at regular intervals?				No sludge was generated.
4.7	Packaging of Chemical Waste a. Stored in suitable container?				
	b. Container properly closed or sealed?	$\boxtimes$			
	c. Spillage cleaned up immediately through the use of an absorbent?	$\boxtimes$			See Follow Up Action #1.
	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
4.8	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	No chemical waste was generated.
	b. Label is in proper dimension and bilingual?			$\boxtimes$	
	c. Information is accurate and sufficient?				



	Description	Yes	No	N/A	Remarks
)	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No chemical waste was generated.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
-	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity</i> <50L) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity</i> >50L)?	$\boxtimes$			
_	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?				
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?				
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	No chemical waste was generated.
1	Storage of Liquid Waste a. Storage area floor/surface permeation-proof?				No liquid waste was generated
-	b. Capacity of retention structure sufficient to accommodate contents of the largest container or 20% volume of waste in storage?			$\boxtimes$	
-	c. Walls or partitions of stacked container storage area constructed of impermeable material?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?				The lot is within the LFG Consultation Zone. The Tenant will be reminded about the precautionary and protection measures mentioned in Section 6.1.2 of the EM&A Manual in the next Monthly Site Audit.
	b. Smoking and open fires prohibited?	$\boxtimes$			
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?				
5.3	Good housekeeping?	$\boxtimes$			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	
	b. Storage area in compliance with the approved plan?				
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	d. Total storage capacity in compliance with the relevant statutory requirement?			$\boxtimes$	
	e. Proper Labelling?			$\boxtimes$	
	f. Dangerous goods properly packaged?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



No. Action Expected By

1. No critical issue was observed.

N/A

#### **Follow-up from Previous Audits**

# No. Follow-up from Previous Audit Dated 16 January 2012

Status Closed

 No oil stains were observed. The Tenant also provided temporary measure for preventing runoff from residual oil left on oil drums during raining.





Observed on 16 January 2012

Observed on 22 February 2012

# **Audit Summary and Sign-off**

No critical issue was observed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Telford	Serco Guardian JV
Signed By	Winnie MA	-	Mr. LEE	Morgan CHIU
Role	ET Site Auditor	IEC	Director	Park Manager
Signature	Division	-	0/7	1



	Audit Details						
Ten	ant	Hong Kong Telfo	rd E	nvirotech	Group	Ltd.	
Date	e & Time	Date 21 March	201	2		Time	11:20am
Lot	No.	EP08-01		_			
Aud	lit Ref.	5		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
Wea	ather Conditions	Fine	$\boxtimes$	Hazy		Ov	ercast Rain
Win	d	Calm	$\boxtimes$	Light Bre	eeze	Str	ong Wind
Ten	perature	<u>19</u> °C					
Hun	nidity	Low	$\boxtimes$	Medium		☐ Hig	<b>Jh</b>
1.1	1. General  Description  EP for Tenant displat entrance?  Environmental Police		ards	Yes /	No 🗆	N/A	Remarks  EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.3	Environmental Man	agement Plan upo	lated	l?			
1.4	a. Emergency Resp documented?	oonse Plan (ERP)					
	b. Drill / training rec	cords available?					
1.5	Employee's training	g record available?				$\boxtimes$	
1.6	Any record of prose	ecution / complaint	?		$\boxtimes$		
1.7	Waste Managemen	nt Plan?					



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				
2.2	Any wastewater treatment facility prior to effluent discharge?		$\boxtimes$		
	If yes, facility is properly maintained and function normally?			$\boxtimes$	
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	
	b. Monitoring frequency met the license requirement?			$\boxtimes$	
	c. Any exceedance?				
	d. If yes, follow-up action taken?			$\boxtimes$	
2.4	Surface run-off control measures in place and adequately maintained?	$\boxtimes$			
2.5	Surface run-off discharging into drainage system?	$\boxtimes$			
2.6	All manholes are covered?				
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	$\boxtimes$			
2.8	Drainage system is well maintained to prevent flooding and overflow?				



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			For the majority of the processes / activities.
.9	a. Processes / activities are located under a covered area?				
•	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?	$\boxtimes$			
10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?			$\boxtimes$	Not observed.
11	a. Oil interceptor provided for drainage discharging from maintenance area?			$\boxtimes$	Maintenance area was not observed.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?			$\boxtimes$	
12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not applicable.
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
	Odour				
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				
3.4	Dust Monitoring  a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?				
3.5	Enclosures are provided around the main dust-generating activities?				
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	Not required.
	b. >35kg of conventional solid fuel per hour				
	c. >1,150 MJ of any gaseous fuel per hour				Not required.
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?			$\boxtimes$	Not required.
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
3.12	Approval from Authority for the use of controlled refrigerant?				Not required.
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?				



	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			$\boxtimes$	To be determined during the next Monthly Site Audit.
4.2	Provision of sufficient waste disposal points/receptacles?				
4.3	Waste disposed of regularly and properly?	$\boxtimes$			
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?	$\boxtimes$			
4.5	Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection?	$\boxtimes$			
4.6	Sludge is collected by a licensed collector at regular intervals?				No sludge was generated.
4.7	Packaging of Chemical Waste a. Stored in suitable container?				
	b. Container properly closed or sealed?	$\boxtimes$			
	c. Spillage cleaned up immediately through the use of an absorbent?	$\boxtimes$			See Follow Up Action #1.
	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
4.8	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	No chemical waste was generated.
	b. Label is in proper dimension and bilingual?			$\boxtimes$	
	c. Information is accurate and sufficient?				



	Description	Yes	No	N/A	Remarks
	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No chemical waste was generated.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
_	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?	$\boxtimes$			
-	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$	
-	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				
-	f. Adequacy of area ventilation?			$\boxtimes$	
-	g. Outdoors storage area should be covered?			$\boxtimes$	
)	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				No chemical waste was generated.
1	Storage of Liquid Waste a. Storage area floor/surface permeation-proof?				No liquid waste was generated
-	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?				The lot is within the LFG Consultation Zone. The Tenant will be reminded about the precautionary and protection measures mentioned in Section 6.1.2 of the EM&A Manual in the next Monthly Site Audit.
	b. Smoking and open fires prohibited?	$\boxtimes$			
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?				
5.3	Good housekeeping?	$\boxtimes$			
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?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?				
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	c. Storage area(s) has been securely locked?			$\boxtimes$	
	d. Total storage capacity in compliance with the relevant statutory requirement?				
	e. Proper Labelling?			$\boxtimes$	
	f. Dangerous goods properly packaged?				
5.7	Potential stagnant pools cleared and mosquito breeding prevented?				



No. Action Expected By

1. No critical issue was observed. N/A

### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

1. Nil N/A

# **Audit Summary and Sign-off**

No critical issue was observed.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	MEC Asia Ltd Atkins China Ltd		Serco Guardian JV
Signed By	Winnie MA	-	Mr. LEE	Morgan CHIU
Role	ET Site Auditor	IEC	Director	Park Manager
Signature	Sino	-	Q4.	1



	Audit Details								
Ten	nant	Hong Kong Telford Envirotech Group Ltd.							
Dat	e & Time	Date 19 April 2	012			Time	11:20am		
Lot	No.	EP08-01							
Aud	dit Ref.	6		_					
IEC	Joint Inspection			No					
We	ather Conditions	Fine		Hazy		⊠ Ove	ercast Rain		
Wir	nd	Calm		Light Breez	ze	Stro	ong Wind		
Ten	nperature	<u>20 °</u> C							
Hur	midity	Low		Medium		⊠ Higl	า		
	1. General								
	Description			Yes	No	N/A	Remarks		
1.1	EP for Tenant displat entrance?	layed on notice boa	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.		
1.2	Environmental Poli	cy documented?							
1.3	Environmental Mar	nagement Plan upd	lated	<del>]</del> ?					
1.4	a. Emergency Res documented?	ponse Plan (ERP)							
	b. Drill / training red	cords available?							
1.5	Employee's training	g record available?	1						
1.6	Any record of prose	ecution / complaint	?		$\boxtimes$				
1.7	Waste Managemer	nt Plan?				$\boxtimes$			



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				
2.2	Any wastewater treatment facility prior to effluent discharge?		$\boxtimes$		
	If yes, facility is properly maintained and function normally?				
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?				
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
2.4	Surface run-off control measures in place and adequately maintained?				
2.5	Surface run-off discharging into drainage system?	$\boxtimes$			
2.6	All manholes are covered?	$\boxtimes$			
2.7	Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided?	$\boxtimes$			
2.8	Drainage system is well maintained to prevent flooding and overflow?	$\boxtimes$			
					/



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination	$\boxtimes$			For the majority of the processes / activities.
.9	Processes / activities are located under a covered area?				
•	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				
10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed.
11	a. Oil interceptor provided for drainage discharging from maintenance area?				Maintenance area was not observed.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?				
	Cargo Handling			$\boxtimes$	Not applicable.
12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
	Odour		$\boxtimes$		
3.2	a. Any odour detected?	_	_	_	
	b. If yes, can the source be identified?				
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?	$\boxtimes$			
3.4	Dust Monitoring a. Monitoring Record available?				Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?				



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	Not required.
	b. >35kg of conventional solid fuel per hour				
	c. >1,150 MJ of any gaseous fuel per hour				Not required.
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?			$\boxtimes$	Not required.
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
3.12	Approval from Authority for the use of controlled refrigerant?				Not required.
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?				



	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?			$\boxtimes$	To be determined during the next Monthly Site Audit.
4.2	Provision of sufficient waste disposal points/receptacles?				
4.3	Waste disposed of regularly and properly?	$\boxtimes$			
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?	$\boxtimes$			
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?			$\boxtimes$	No sludge was generated.
4.7	Packaging of Chemical Waste a. Stored in suitable container?	$\boxtimes$			
	b. Container properly closed or sealed?	$\boxtimes$			
	c. Spillage cleaned up immediately through the use of an absorbent?				
	d. Approval obtained for capacity of containers > 450L?			$\boxtimes$	
4.8	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?			$\boxtimes$	No chemical waste was generated.
	b. Label is in proper dimension and bilingual?			$\boxtimes$	
	c. Information is accurate and sufficient?				



	Description	Yes	No	N/A	Remarks
	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?			N/A ⊠	No chemical waste was generated.
-	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity</i> <50L) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity</i> >50L)?	$\boxtimes$			
-	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?			$\boxtimes$	
-	f. Adequacy of area ventilation?				
	g. Outdoors storage area should be covered?				
_ )	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)			$\boxtimes$	No chemical waste was generated.
•	Storage of Liquid Waste a. Storage area floor/surface permeation-proof?			$\boxtimes$	No liquid waste was generated
	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?			$\boxtimes$	



#### 5. Other Issues **Description** No N/A **Remarks** Landfill Gas Hazard $\boxtimes$ The lot is within the LFG (within LFG Consultation Zone) Consultation Zone. The Tenant will be reminded about the 5.1 a. Workers and visitors alerted to possible precautionary and protection LGF hazards? measures mentioned in Section 6.1.2 of the EM&A Manual in the next Monthly Site Audit. b. Smoking and open fires prohibited? $\boxtimes$ Security lighting directed downward into the 5.2 work areas to prevent glare to the surrounding receivers? 5.3 Good housekeeping? X $\Box$ 5.4 Any areas within the lot to be used for $\boxtimes$ П recycling processes are concrete paved? Valid calibration certificate for any П $\Box$ $\boxtimes$ No monitoring equipment. monitoring equipment? $\boxtimes$ **Dangerous Goods** 5.6 a. Valid license for manufacturing / storing dangerous goods? $\boxtimes$ b. Storage area in compliance with the П approved plan? c. Storage area(s) has been securely $\boxtimes$ locked? d. Total storage capacity in compliance with $\boxtimes$ the relevant statutory requirement? e. Proper Labelling? $\boxtimes$ f. Dangerous goods properly packaged? $\boxtimes$ 5.7 Potential stagnant pools cleared and $\boxtimes$ mosquito breeding prevented?



No. Action Expected By

1. No critical issue was observed. N/A

### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 21 March 2012

**Status** 

1. Nil N/A

# **Audit Summary and Sign-off**

No critical issue was observed.

	ET	IEC*	Tenant	Operator	
Organisation	SMEC Asia Ltd	Atkins China Ltd	Telford	Serco Guardian JV	
Signed By	Winnie MA	Keith CHAU	Mr. LEE	Morgan CHIU	
Role	ET Site Auditor	IEC Site Auditor	Director	Park Manager	
Signature	Dishe	Den -	of	1	



# **APPENDIX 6-6**

Tenant-specific Audit Checklists for the Reporting Quarter

YOT EcoPark Plastic Resources Recycling Centre



	Audit Details						
Ten	ant	Yan Oi Tong Lim	nited				
Date	e & Time	Date 22 Februa	ary 2	012		Tin	ne 10:45am
Lot	No.	P7		_			
Auc	lit Ref.	19		_			
IEC	Joint Inspection	Yes	$\boxtimes$	No			
Wea	ather Conditions	Fine		Hazy		$\boxtimes$	Overcast Rain
Win	d	⊠ Calm		Light Bre	eeze		Strong Wind
Ten	nperature	19 °C					
Hun	nidity	Low		Medium		$\boxtimes$	High
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant displ at entrance?	ayed on notice bo	/ 🗆			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.	
1.2	Environmental Police	cy documented?					The Operator's Environmental Policy is documented.
1.3	Environmental Man	agement Plan upo	dated	<del> </del> ? ⊠			The Tenant's EMP is documented.
1.4	a. Emergency Resp documented?	oonse Plan (ERP)					The Tenant's ERP is documented.
	b. Drill / training rec	ords available?					
1.5	Employee's training	record available?	)				
1.6	Any record of prose	ecution / complaint	?				

the EMP.

Waste Management Plan?

The Tenant has included the WMP into



# 2. Water Quality **Description** Yes No N/A Remarks Valid Effluent Discharge License available? Licence No. WT00006013-2010 valid 2.1 $\square$ until 28 Feb 2015. 2.2 Any wastewater treatment facility prior to effluent discharge? If yes, facility is properly maintained and function normally? **Effluent Monitoring** $\boxtimes$ As per the discharge licence, selfmonitoring shall be performed when a. Sampling / Monitoring Record available? 2.3 required. b. Monitoring frequency met the license requirement? c. Any exceedance? $\boxtimes$ d. If yes, follow-up action taken? Surface run-off control measures in place 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage system? All manholes are covered? 2.7 Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided? Drainage system is well maintained to 2.8 prevent flooding and overflow?



				Remarks
Processes with high Risk of Contamination	$\boxtimes$			Works for recycling were undertaken at covered areas.
a. Processes / activities are located under a covered area?				
b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				Water is unlikely to be contaminated within the lot.
Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Only grease is used at the lot.
a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
b. If yes, oil and grease removed regularly?			$\boxtimes$	
c. Collected by licenced collector?				
Cargo Handling a. Cargo Handling Guideline available and			$\boxtimes$	Not required.
spillage when loading or unloading?				
b. Materials and bulk cargo are properly packed?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?  c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?  Equipment oil and lubrication replacements are performed only in bunded maintenance area?  a. Oil interceptor provided for drainage discharging from maintenance area?  b. If yes, oil and grease removed regularly?  c. Collected by licenced collector?  Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?  b. Materials and bulk cargo are properly	b. Stop-logs installed in the perimeter drainage system for uncovered areas?  c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?  Equipment oil and lubrication replacements are performed only in bunded maintenance area?  a. Oil interceptor provided for drainage discharging from maintenance area?  b. If yes, oil and grease removed regularly?  c. Collected by licenced collector?	b. Stop-logs installed in the perimeter drainage system for uncovered areas?  c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?  Equipment oil and lubrication replacements are performed only in bunded maintenance area?  a. Oil interceptor provided for drainage discharging from maintenance area?  b. If yes, oil and grease removed regularly?  c. Collected by licenced collector?	b. Stop-logs installed in the perimeter drainage system for uncovered areas?  c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?  Equipment oil and lubrication replacements are performed only in bunded maintenance area?  a. Oil interceptor provided for drainage discharging from maintenance area?  b. If yes, oil and grease removed regularly?  Cargo Handling a. Cargo Handling a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?  b. Materials and bulk cargo are properly



# 3. Air Quality Yes No N/A **Description** Remarks a. Valid Specified Process License for all 3.1 Not required. specified process available? b. SP License conditions / monitoring requirements met? **Odour** 3.2 a. Any odour detected? b. If yes, can the source be identified? c. Odorous materials are covered? d. If odour control system is installed, is it operating normally? All dusty materials are sprayed with water $\boxtimes$ No dusty materials were found to be or covered by impervious sheeting prior to used on-site. any loading, unloading or transfer operation? **Dust Monitoring** a. Monitoring Record available? 3.4 b. Monitoring frequency met the $\boxtimes$ requirement? $\square$ $\square$ $\square$ 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. Air Quality (continued)				
3.7	Description  Dark smoke emitted from chimney or powered plant is avoided?	Yes	No	N/A	Remarks  There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:				
	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
3.12					
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	
3.13	All air pollution control systems are properly maintained and function normally?	$\boxtimes$			
3.14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			



#### 4. Waste / Chemical Management **Description** Yes No N/A Remarks Chemical Waste Producer Registration 4.1 Registration No. 9211-421-Y2453-03 completed? for spent mineral oil and spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ $\boxtimes$ П See Action #1 and Follow Up Action receptacles? Waste disposed of regularly and properly? $\boxtimes$ Twice a week. 4.4 Sorting of materials on-site for reuse or disposal to designated outlet? Record of quantities of waste generated, 4.5 recycled and disposed properly kept and easily retrieved for inspection? 4.6 Sludge is collected by a licensed collector at $\boxtimes$ Sludge / debris from the wastewater regular intervals? treatment facility are collected by licensed collector regularly. Packaging of Chemical Waste П $\boxtimes$ No chemical waste was produced. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\boxtimes$ the use of an absorbent? $\sqcap$ $\sqcap$ $\boxtimes$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ No chemical waste was produced. a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and bilingual? $\boxtimes$ c. Information is accurate and sufficient?



	4. Waste / Chemical Management (continu	ueu)			
	Description	Yes	No	N/A	Remarks
1.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No chemical waste was produced.
	b. Incompatible wastes separated by an impermeable partition?			$\boxtimes$	
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;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?				
	f. Adequacy of area ventilation?				
	g. Outdoors storage area should be covered?				
.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				
11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No liquid waste was produced.
	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 **Description** Yes No N/A Remarks Landfill Gas Hazard The lot is within the LFG Consultation Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. 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? Any areas within the lot to be used for The whole lot has been concreterecycling processes are concrete paved? paved. 5.5 Valid calibration certificate for any $\sqcap$ $\sqcap$ $\boxtimes$ monitoring equipment? $\boxtimes$ There were no DGs stored on site. **Dangerous Goods** 5.6 a. Valid license for manufacturing / storing dangerous goods? b. Storage area in compliance with the approved plan? c. Storage area(s) has been securely $\boxtimes$ locked? $\square$ $\square$ $\square$ d. Total storage capacity in compliance with the relevant statutory requirement? e. Proper Labelling? f. Dangerous goods properly packaged? Potential stagnant pools cleared and mosquito breeding prevented?



No. Action Expected By

1. General refuse was observed near surface channels along site boundary. The Tenant 27 Feb 2012 should properly collect and dispose of the refuse.



# **Follow-up from Previous Audits**

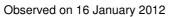
No. Follow-up from Previous Audits Dated 16 January 2012

Status

1. No general refuse was observed.

Closed







Observed on 22 February 2012

# **Audit Summary and Sign-off**

The Tenant was reminded to implement measures to maintain site tidiness.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Yan Oi Tong	Serco Guardian JV
Signed By	Winnie MA	-	Asa Ng	Morgan CHIU
Role	ET Site Auditor	IEC	Acting Manager	Park Manager
Signature	Dishos	-	Cham	3



		Audit Details						
	Tenaı	nt	Yan Oi Tong Lim					
	Date & Time		Date 21 March	201	2		Tin	ne 10:45am
	Lot N	0.	P7					
	Audit	Ref.	20					
	IEC J	oint Inspection	Yes	$\boxtimes$	No			
	Weatl	her Conditions	Fine	$\boxtimes$	Hazy			Overcast Rain
	Wind		Calm	$\boxtimes$	Light Br	eeze		Strong Wind
	Temp	erature	19 °C					
	Humi	dity	Low	$\boxtimes$	Medium	1		High
		1. General			Voc	No	N/A	Remarks
4		Description	avad an natica bas	v do	Yes	No		
1		EP for Tenant displa at entrance?	ayed on notice boa	aras	<b>/</b>	Ш		EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1	.2	Environmental Polic	ey documented?					The Operator's Environmental Policy is documented.
1	.3	Environmental Man	agement Plan upd	atec	<del>]</del> ? ⊠			The Tenant's EMP is documented.
1	.4	a. Emergency Resp documented?	onse Plan (ERP)					The Tenant's ERP is documented.
		b. Drill / training rec	ords available?					
1	.5	Employee's training	record available?					
1	.6	Any record of prose	cution / complaint	?		$\boxtimes$		
1	.7	Waste Managemen	t Plan?					The Tenant has included the WMP into the EMP.



# 2. Water Quality **Description** Yes No N/A Remarks Valid Effluent Discharge License available? Licence No. WT00006013-2010 valid 2.1 until 28 Feb 2015. Any wastewater treatment facility prior to 2.2 effluent discharge? If yes, facility is properly maintained and function normally? $\boxtimes$ As per the discharge licence, self-**Effluent Monitoring** monitoring shall be performed when 2.3 a. Sampling / Monitoring Record available? required. b. Monitoring frequency met the license requirement? $\boxtimes$ c. Any exceedance? d. If yes, follow-up action taken? $\boxtimes$ Surface run-off control measures in place 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage system? All manholes are covered? 2.7 Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided? Drainage system is well maintained to 2.8 prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
2.9	Processes with high Risk of Contamination  a. Processes / activities are located under a				Works for recycling were undertaken at covered areas.
	covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
_	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				Water is unlikely to be contaminated within the lot.
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Only grease is used at the lot.
2.11	a. Oil interceptor provided for drainage discharging from maintenance area?			$\boxtimes$	Not required.
-	b. If yes, oil and grease removed regularly?			$\boxtimes$	
_	c. Collected by licenced collector?			$\boxtimes$	
-	Cargo Handling			$\boxtimes$	Not required.
.12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?		_		*
_	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



# 3. Air Quality Yes No N/A **Description** Remarks a. Valid Specified Process License for all 3.1 Not required. specified process available? b. SP License conditions / monitoring requirements met? **Odour** 3.2 a. Any odour detected? b. If yes, can the source be identified? $\boxtimes$ c. Odorous materials are covered? d. If odour control system is installed, is it operating normally? 3.3 All dusty materials are sprayed with water $\boxtimes$ No dusty materials were found to be or covered by impervious sheeting prior to used on-site. any loading, unloading or transfer operation? **Dust Monitoring** a. Monitoring Record available? 3.4 b. Monitoring frequency met the $\boxtimes$ requirement? $\sqcap$ $\sqcap$ $\boxtimes$ c. Any exceedance? d. If yes, follow-up action taken? 3.5 Enclosures are provided around the main dust-generating activities? Open burning is avoided?



#### 3. Air Quality (continued) **Description** Yes No N/A Remarks Dark smoke emitted from chimney or $\boxtimes$ There is no chimney installed on-3.7 powered plant is avoided? $\boxtimes$ П 3.8 Vehicles and equipment are switched off while not in use? $\boxtimes$ 3.9 Approval certificate issued by the Authority is available for furnace, oven or chimney consuming: a. >25L of conventional liquid fuel per hour $\boxtimes$ b. >35kg of conventional solid fuel per hour $\boxtimes$ c. >1,150 MJ of any gaseous fuel per hour 3.10 Approval from Authority is available for the $\boxtimes$ 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 $\boxtimes$ equipment installed by tenants must be tested to ensure compliance for landfill disposal. 3.12 a. Approval from Authority for the use of $\boxtimes$ controlled refrigerant? b. If yes, record of refrigeration equipment $\boxtimes$ service available? П $\Box$ 3.13 All air pollution control systems are properly $\boxtimes$ maintained and function normally? 3.14 Only Ultra-Low Sulphur Diesel is used? $\boxtimes$



#### 4. Waste / Chemical Management **Description** Yes No N/A Remarks **Chemical Waste Producer Registration** 4.1 Registration No. 9211-421-Y2453-03 completed? for spent mineral oil and spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ $\boxtimes$ Follow Up Action #1. receptacles? 4.3 Waste disposed of regularly and properly? $\boxtimes$ 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? $\boxtimes$ 4.6 Sludge is collected by a licensed collector at Sludge / debris from the wastewater regular intervals? treatment facility are collected by licensed collector regularly. Packaging of Chemical Waste $\Box$ $\boxtimes$ No chemical waste was produced. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\boxtimes$ the use of an absorbent? ПП $\bowtie$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ No chemical waste was produced. a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and $\boxtimes$ bilingual? $\boxtimes$ c. Information is accurate and sufficient?



	Description				
	Description	Yes	No	N/A	Remarks
	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				No chemical waste was produced.
	b. Incompatible wastes separated by an impermeable partition?				
,	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?				
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?			$\boxtimes$	
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?			$\boxtimes$	
•	f. Adequacy of area ventilation?			$\boxtimes$	
	g. Outdoors storage area should be covered?			$\boxtimes$	
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)				
1	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No liquid waste was produced.
	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?			$\boxtimes$	



# 5. Other Issues **Description** Yes No N/A Remarks Landfill Gas Hazard The lot is within the LFG Consultation Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. b. Smoking and open fires prohibited? 5.2 Security lighting directed downward into the $\boxtimes$ work areas to prevent glare to the surrounding receivers? 5.3 Good housekeeping? Any areas within the lot to be used for The whole lot has been concreterecycling processes are concrete paved? paved. $\bowtie$ 5.5 Valid calibration certificate for any monitoring equipment? $\Box$ $\boxtimes$ There were no DGs stored on site. **Dangerous Goods** 5.6 a. Valid license for manufacturing / storing dangerous goods? b. Storage area in compliance with the approved plan? c. Storage area(s) has been securely $\boxtimes$ locked? d. Total storage capacity in compliance with $\sqcap$ $\sqcap$ $\boxtimes$ the relevant statutory requirement? e. Proper Labelling? $\boxtimes$ f. Dangerous goods properly packaged? Potential stagnant pools cleared and mosquito breeding prevented?



No. Action Expected By

1. No critical issues were observed.

N/A

## **Follow-up from Previous Audits**

## No. Follow-up from Previous Audits Dated 22 February 2012

**Status** 

 General refuse/waste plastics observed near surface channels along site boundary have been cleared. Closed





Observed on 22 February 2012

Observed on 21 March 2012

## **Audit Summary and Sign-off**

The Tenant has taken action to improve site tidiness and the site tidiness was slightly improved as compared with previous site audits.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Yan Oi Tong	Serco Guardian JV
Signed By	ed By Winnie MA -		Asa Ng	Morgan CHIU
Role	ET Site Auditor	IEC	Acting Manager	Park Manager
Signature	Divis	-	Am	1



	Audit Details						
Te	nant	Yan Oi Tong Lim	ited				
Da	te & Time	Date 19 April 20	012			Tin	ne 11:00am
Lo	t No.	P7		_			
Au	dit Ref.	21		_			
IE	C Joint Inspection	⊠ Yes		No			
We	eather Conditions	Fine		Hazy		$\boxtimes$	Overcast Rain
Wi	nd	Calm	$\boxtimes$	Light Bre	eeze		Strong Wind
Те	mperature	<u>20</u> °C					
Hu	midity	Low		Medium		$\boxtimes$	High
	1. General  Description			Yes	No	N/A	Remarks
1.1	EP for Tenant displ at entrance?	ayed on notice boa	ards	/ 🗆			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Police	cy documented?					The Operator's Environmental Policy is documented.
1.3	Environmental Man	agement Plan upd	atec	<b>!?</b> ⊠			The Tenant's EMP is documented.
1.4	a. Emergency Resp documented?	oonse Plan (ERP)		$\boxtimes$			The Tenant's ERP is documented.
	b. Drill / training rec	ords available?		$\boxtimes$			
1.5	Employee's training	record available?					
1.6	Any record of prose	ecution / complaint	?				
1.7	Waste Managemen	it Plan?					The Tenant has included the WMP into the EMP.



# 2. Water Quality **Description** Yes No N/A Remarks Valid Effluent Discharge License available? Licence No. WT00006013-2010 valid 2.1 until 28 Feb 2015. 2.2 Any wastewater treatment facility prior to effluent discharge? If yes, facility is properly maintained and function normally? $\boxtimes$ As per the discharge licence, self-**Effluent Monitoring** monitoring shall be performed when 2.3 a. Sampling / Monitoring Record available? required. b. Monitoring frequency met the license requirement? $\boxtimes$ c. Any exceedance? d. If yes, follow-up action taken? $\boxtimes$ Surface run-off control measures in place 2.4 and adequately maintained? 2.5 Surface run-off discharging into drainage system? All manholes are covered? 2.7 Foam, oil, grease, litter or other objectionable matters in water of nearby drain / sewer are avoided? Drainage system is well maintained to 2.8 prevent flooding and overflow?



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				Works for recycling were undertaken at covered areas.
2.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?				Water is unlikely to be contaminated within the lot.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Only grease is used at the lot.
11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
•	b. If yes, oil and grease removed regularly?			$\boxtimes$	
	c. Collected by licenced collector?				
	Cargo Handling			$\boxtimes$	Not required.
.12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



# 3. Air Quality Yes No N/A **Description** Remarks a. Valid Specified Process License for all 3.1 Not required. specified process available? b. SP License conditions / monitoring requirements met? **Odour** 3.2 a. Any odour detected? b. If yes, can the source be identified? $\boxtimes$ c. Odorous materials are covered? d. If odour control system is installed, is it operating normally? 3.3 All dusty materials are sprayed with water $\boxtimes$ No dusty materials were found to be or covered by impervious sheeting prior to used on-site. any loading, unloading or transfer operation? **Dust Monitoring** a. Monitoring Record available? 3.4 b. Monitoring frequency met the $\boxtimes$ requirement? $\square$ $\square$ $\square$ c. Any exceedance? d. If yes, follow-up action taken? 3.5 Enclosures are provided around the main dust-generating activities? Open burning is avoided?



#### 3. Air Quality (continued) **Description** Yes No N/A Remarks Dark smoke emitted from chimney or $\boxtimes$ There is no chimney installed on-3.7 powered plant is avoided? $\boxtimes$ П 3.8 Vehicles and equipment are switched off while not in use? $\boxtimes$ 3.9 Approval certificate issued by the Authority is available for furnace, oven or chimney consuming: a. >25L of conventional liquid fuel per hour $\boxtimes$ b. >35kg of conventional solid fuel per hour $\boxtimes$ c. >1,150 MJ of any gaseous fuel per hour 3.10 Approval from Authority is available for the $\boxtimes$ 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 $\boxtimes$ equipment installed by tenants must be tested to ensure compliance for landfill disposal. 3.12 a. Approval from Authority for the use of $\boxtimes$ controlled refrigerant? b. If yes, record of refrigeration equipment $\boxtimes$ service available? П $\Box$ 3.13 All air pollution control systems are properly $\boxtimes$ maintained and function normally? 3.14 Only Ultra-Low Sulphur Diesel is used? $\boxtimes$



### 4. Waste / Chemical Management **Description** Yes No N/A Remarks **Chemical Waste Producer Registration** 4.1 Registration No. 9211-421-Y2453-03 completed? for spent mineral oil and spent lubricating oil. 4.2 Provision of sufficient waste disposal points/ receptacles? 4.3 Waste disposed of regularly and properly? $\boxtimes$ Twice a week. 4.4 Sorting of materials on-site for reuse or disposal to designated outlet? Record of quantities of waste generated, 4.5 recycled and disposed properly kept and easily retrieved for inspection? $\boxtimes$ 4.6 Sludge is collected by a licensed collector at Sludge / debris from the wastewater regular intervals? treatment facility are collected by licensed collector regularly. Packaging of Chemical Waste $\Box$ $\boxtimes$ No chemical waste was produced. a. Stored in suitable container? 4.7 b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\boxtimes$ the use of an absorbent? ПП $\bowtie$ d. Approval obtained for capacity of containers > 450L? Labelling of Chemical Waste $\boxtimes$ No chemical waste was produced. a. Label is securely attached, clean and 4.8 visible? b. Label is in proper dimension and $\boxtimes$ bilingual? $\boxtimes$ c. Information is accurate and sufficient?



### 4. Waste / Chemical Management (continued) **Description** Yes No N/A Remarks Storage of Chemical Waste $\boxtimes$ No chemical waste was produced. 4.9 a. Proper "Chemical Waste" signs are displayed? $\boxtimes$ b. Incompatible wastes separated by an impermeable partition? c. Containers kept in receptacle of suitable $\boxtimes$ material and construction (if quantity <50L) or drip trays capable of storing 110% of the volume of largest (if quantity >50L)? $\boxtimes$ d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers? $\boxtimes$ e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry? П $\boxtimes$ f. Adequacy of area ventilation? $\boxtimes$ g. Outdoors storage area should be covered? 4.10 Chemical wastes are collected by a $\boxtimes$ licensed chemical waste collector? (retention of trip ticket copies for 12 months) Storage of Liquid Waste $\boxtimes$ No liquid waste was produced. 4.11 a. Storage area floor/surface permeationproof? ПП $\bowtie$ 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 $\boxtimes$ storage area constructed of impermeable material?



# 5. Other Issues **Description** Yes No N/A Remarks Landfill Gas Hazard The lot is within the LFG Consultation Zone and the Tenant has alerted (within LFG Consultation Zone) workers/visitors about possible LFG 5.1 a. Workers and visitors alerted to possible hazards. A notice is also posted at the LGF hazards? entrance. b. Smoking and open fires prohibited? 5.2 Security lighting directed downward into the $\boxtimes$ work areas to prevent glare to the surrounding receivers? 5.3 Good housekeeping? Action #1 and 2. Any areas within the lot to be used for The whole lot has been concreterecycling processes are concrete paved? paved. $\bowtie$ 5.5 Valid calibration certificate for any monitoring equipment? $\Box$ $\boxtimes$ There were no DGs stored on site. **Dangerous Goods** 5.6 a. Valid license for manufacturing / storing dangerous goods? b. Storage area in compliance with the approved plan? c. Storage area(s) has been securely $\boxtimes$ locked? d. Total storage capacity in compliance with $\sqcap$ $\sqcap$ $\boxtimes$ the relevant statutory requirement? e. Proper Labelling? $\boxtimes$ f. Dangerous goods properly packaged? Potential stagnant pools cleared and mosquito breeding prevented?



No. Action Expected By

1. Rubbish was observed inside a catch pit of Lot P6. The Tenant should clear the rubbish. 5 May 2012



## **Follow-up from Previous Audits**

No. Follow-up from Previous Audits Dated 21 March 2012

**Status** 

N/A

# **Audit Summary and Sign-off**

Nil

Since the rainy season is coming, the tenant was reminded to prevent or remove stagnant water after rain to control mosquitoes.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Yan Oi Tong	Serco Guardian JV
Signed By	Winnie MA	Keith CHAU	Asa Ng	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Acting Manager	Park Manager
Signature	Distre	Dero-	A	1



# **APPENDIX 6-7**

Tenant-specific Audit Checklists for the Reporting Quarter

St. James' Settlement "WEEE GO GREEN" EcoPark



# Audit Details

Date & Time	Date 22 Feb	oruary 2012	Time <u>11:30am</u>	
Lot No.	P5			
Audit Ref.	17			
IEC Joint Inspection	Yes	⊠ No		
Weather Conditions	Fine	☐ Hazy		Rain
Wind	⊠ Calm	Light Breeze	☐ Strong Wind	
Temperature	<u>19</u> °C			
Humidity	Low	Medium		

	Description	Yes	No	N/A	Remarks
1.1	EP for Tenant displayed on notice boards / at entrance?				EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Policy documented?	$\boxtimes$			The Operator's Environmental Policy is documented. Tenant follows this.
1.3	Environmental Management Plan updated?				The Tenant's EMP is documented.
1.4	a. Emergency Response Plan (ERP) documented?				The Tenant's ERP is documented.
	b. Drill / training records available?	$\boxtimes$			
1.5	Employee's training record available?				
1.6	Any record of prosecution / complaint?				
1.7	Waste Management Plan?				The Tenant's WMP is documented.



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				Licence No. WT00007365-2010 valid until 31 Aug 2015.
2.2	Any wastewater treatment facility prior to effluent discharge?				A screen has been installed as treatment device.
	If yes, facility is properly maintained and function normally?	$\boxtimes$			
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	As per the discharge licence, self-monitoring shall be performed when required.
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?				
2.4	Surface run-off control measures in place and adequately maintained?				
2.5	Surface run-off discharging into drainage system?	$\boxtimes$			
2.6	All manholes are covered?	$\boxtimes$			
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?				



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination			$\boxtimes$	The risk of contamination for the recycling process is low.
.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
2.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
	b. If yes, oil and grease removed regularly?				
	c. Collected by licenced collector?			$\boxtimes$	
.12	Cargo Handling  a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?			$\boxtimes$	Not required.
	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?				
3.2	Odour a. Any odour detected?				
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				No dusty materials were found to be used on-site.
3.4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour				
-	b. >35kg of conventional solid fuel per hour			$\boxtimes$	
-	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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	Approval from Authority for the use of controlled refrigerant?	$\boxtimes$			All relevant equipments are approved by EPD.
-	b. If yes, record of refrigeration equipment service available?				Recorded by EPD.
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?				



	4. Waste / Chemical Management				
	Description	Yes	No	N/A	Remarks
4.1	Chemical Waste Producer Registration completed?				Registration No. 9211-421- S3222-08 for spent lubricating oil, unwanted refrigerant and CRT.
4.2	Provision of sufficient waste disposal points/ receptacles?				
4.3	Waste disposed of regularly and properly?				Waste from workshop is stored in temporary area and disposed of as general refuse twice a week <i>via</i> the Operator.  Chemical waste is transported to
					EPD's Chemical Waste Treatment Centre by licensed collector once per month.
4.4	Sorting of materials on-site for reuse or disposal to designated outlet?				Recyclable materials were passed to other recyclers.
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?			$\boxtimes$	
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?				No spillage.
	d. Approval obtained for capacity of containers > 450L?				
4.8	Labelling of Chemical Waste  a. Label is securely attached, clean and visible?	$\boxtimes$			
	b. Label is in proper dimension and bilingual?				
	c. Information is accurate and sufficient?	$\boxtimes$			



	Description	Yes	No	N/A	Remarks
.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				
	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?	$\boxtimes$			
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?	$\boxtimes$			
,	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?	$\boxtimes$			
	f. Adequacy of area ventilation?	$\boxtimes$			
	g. Outdoors storage area should be covered?			$\boxtimes$	
10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)	$\boxtimes$			
11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?				No liquid waste was observed.
•	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?				The lot is within the LFG Consultation Zone and the Tenant has alerted workers/visitors about possible LFG hazards. A notice is also posted at the visitor centre.
	b. Smoking and open fires prohibited?	$\boxtimes$			
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			$\boxtimes$	
5.3	Good housekeeping?				
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?				No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	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?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?				



No. Action Expected By

1. No critical issues were identified. N/A

## **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 16 January 2012

**Status** 

1. Nil. N/A

## **Audit Summary and Sign-off**

The site was generally tidy.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	St. James	Serco Guardian JV
Signed By	Winnie MA	-	Ken FUNG	Morgan CHIU
Role	ET Site Auditor	IEC	Assistant Manager	Park Manager
Signature	Divide	-	Von	13



#### Audit Details

1.3

	Addit Details								
Ten	ant	St. James' Sett	tlement						
Dat	e & Time	Date 21 Marc	h 2012			Time	11:30am		
Lot	No.	P5		_					
Auc	lit Ref.	18		-					
IEC	Joint Inspection	Yes	$\boxtimes$	No					
Wea	ather Conditions	Fine	$\boxtimes$	Hazy		Ov	ercast	Rain	
Win	nd		$\boxtimes$	Light Bree	eze	Str	ong Wind		
Ten	nperature	<u>19</u> °C							
Hur	midity	Low	$\boxtimes$	Medium		☐ Hig	jh		
	1. General								\
(	Description			Yes	No	N/A	Remark	5	
1.1	EP for Tenant dispat entrance?	played on notice b	oards /				is display	coPark (EP-226/2005/A) yed at the entrance of . EP for Tenant is not	
1.2	Environmental Pol	licy documented?		$\boxtimes$				rator's Environmental documented. Tenant nis.	_

1.4	a. Emergency Response Plan (ERP)	$\boxtimes$		The Tenant's ERP is

Environmental Management Plan updated?

documented?				documented.	
b Drill / training records ava	ailable?	$\square$	П		Т

 $\boxtimes$ 

The Tenant's EMP is documented.

- 1.5 Employee's training record available?
- 1.6 Any record of prosecution / complaint?
- 1.7 Waste Management Plan? 

  | The Tenant's WMP is documented.



scription lid Effluent Discharge License available?  y wastewater treatment facility prior to uent discharge?  es, facility is properly maintained and ction normally?	Yes	No .	N/A	Remarks Licence No. WT00007365-2010 valid until 31 Aug 2015.
y wastewater treatment facility prior to uent discharge?  es, facility is properly maintained and	_			valid until 31 Aug 2015.
uent discharge? es, facility is properly maintained and	$\boxtimes$			
				A screen has been installed as treatment device.
•	$\boxtimes$			
iluent Monitoring Sampling / Monitoring Record available?			$\boxtimes$	As per the discharge licence, self-monitoring shall be performed when required.
Monitoring frequency met the license requirement?			$\boxtimes$	
Any exceedance?			$\boxtimes$	
f yes, follow-up action taken?			$\boxtimes$	
rface run-off control measures in place d adequately maintained?			$\boxtimes$	
rface run-off discharging into drainage stem?	$\boxtimes$			
manholes are covered?	$\boxtimes$			
am, oil, grease, litter or other ectionable matters in water of nearby in / sewer are avoided?				
ainage system is well maintained to	$\boxtimes$			
a e i	m, oil, grease, litter or other ectionable matters in water of nearby n / sewer are avoided?	m, oil, grease, litter or other ctionable matters in water of nearby n / sewer are avoided?	m, oil, grease, litter or other ctionable matters in water of nearby n / sewer are avoided?	m, oil, grease, litter or other



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
.9	<ul> <li>a. Processes / activities are located under a covered area?</li> </ul>				
•	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
-	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed.
.11	a. Oil interceptor provided for drainage discharging from maintenance area?				Not required.
-	b. If yes, oil and grease removed regularly?			$\boxtimes$	
-	c. Collected by licenced collector?				
-	Cargo Handling			$\boxtimes$	Not required.
.12	<ul> <li>a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?</li> </ul>				
_	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?			$\boxtimes$	
	Odour		$\boxtimes$		
3.2	a. Any odour detected?				
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?				
	d. If odour control system is installed, is it operating normally?				
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				No dusty materials were found to be used on-site.
3.4	Dust Monitoring a. Monitoring Record available?				Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	Description	Yes	No	N/A	Remarks
.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed on site.
8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:			$\boxtimes$	
-	<ul><li>a. &gt;25L of conventional liquid fuel per hour</li><li>b. &gt;35kg of conventional solid fuel per hour</li></ul>			$\boxtimes$	
	c. >1,150 MJ of any gaseous fuel per hour				
10	Approval from Authority is available for the use of liquid fuel with a viscosity point of ignition >30 centistokes or an equivalent viscosity?				
I1	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
	a. Approval from Authority for the use of controlled refrigerant?	$\boxtimes$			All relevant equipments are approved by EPD.
•	b. If yes, record of refrigeration equipment service available?				Recorded by EPD.
	All air pollution control systems are properly maintained and function normally?				
14	Only Ultra-Low Sulphur Diesel is used?	$\boxtimes$			



#### 4. Waste / Chemical Management **Description** Yes No N/A **Remarks Chemical Waste Producer Registration** 4.1 $\boxtimes$ Registration No. 9211-421completed? S3222-08 for spent lubricating oil, unwanted refrigerant and CRT. $\boxtimes$ 4.2 Provision of sufficient waste disposal points/ receptacles? $\boxtimes$ $\Box$ 4.3 Waste disposed of regularly and properly? Waste from workshop is stored in temporary area and disposed of as general refuse twice a week via the Operator. Chemical waste is transported to EPD's Chemical Waste Treatment Centre by licensed collector once per month. $\boxtimes$ 4.4 Sorting of materials on-site for reuse or Recyclable materials were disposal to designated outlet? passed to other recyclers. $\boxtimes$ П 4.5 Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection? П П $\boxtimes$ Sludge is collected by a licensed collector at 4.6 regular intervals? $\boxtimes$ П Packaging of Chemical Waste a. Stored in suitable container? 4.7 b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\Box$ $\boxtimes$ No spillage. the use of an absorbent? d. Approval obtained for capacity of П $\boxtimes$ containers > 450L? $\boxtimes$ Labelling of Chemical Waste $\Box$ 4.8 a. Label is securely attached, clean and visible? $\boxtimes$ b. Label is in proper dimension and bilingual? $\boxtimes$ П c. Information is accurate and sufficient?



	4. Waste / Chemical Management (continu	ed)			
	Description	Yes	No	N/A	Remarks
4.9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?				
	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity &lt;50L</i> ) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity &gt;50L</i> )?	$\boxtimes$			
	d. Enclosed on 3 sides with no less than 2m in height or height of tallest container or stack of containers?	$\boxtimes$			
	e. Containers with chemical waste are properly stored and locked at designated area which is clean and dry?				
	f. Adequacy of area ventilation?	$\boxtimes$			
	g. Outdoors storage area should be covered?			$\boxtimes$	
4.10	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)	$\boxtimes$			
4.11	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No liquid waste was observed.
	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?				The lot is within the LFG Consultation Zone and the Tenant has alerted workers/visitors about possible LFG hazards. A notice is
					also posted at the visitor centre.
	b. Smoking and open fires prohibited?		Ц		
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?				
5.3	Good housekeeping?	$\boxtimes$			
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?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?				There were no DGs stored on site.
	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?				



No. Action Expected By

1. No critical issues were identified. N/A

#### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 22 February 2012

**Status** 

1. Nil. N/A

# **Audit Summary and Sign-off**

The site was generally tidy.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	St. James	Serco Guardian JV
Signed By	Winnie MA	-	Ken FUNG	Morgan CHIU
Role	ET Site Auditor	IEC	Assistant Manager	Park Manager
Signature	Distre	-	Un	1



	Audit Details						
Ter	nant	St. James' Settle	emen	nt			
Dat	e & Time	Date 19 April 2	012			Time	11:00am
Lot	No.	P5					
Aud	dit Ref.	19		_			
IEC	Joint Inspection			No			
We	ather Conditions	Fine		Hazy		Ov	ercast Rain
Wir	nd	Calm	$\boxtimes$	Light Bree	ze	Str	ong Wind
Ter	mperature	<u>20</u> °C					
Hui	midity	Low		Medium		⊠ Hig	η <mark>h</mark>
	1. General						
	Description			Yes	No	N/A	Remarks
1.1	EP for Tenant disp at entrance?	layed on notice bo	ards	/			EP for EcoPark (EP-226/2005/A) is displayed at the entrance of EcoPark. EP for Tenant is not required.
1.2	Environmental Pol	icy documented?					The Operator's Environmental Policy is documented. Tenant follows this.
1.3	Environmental Man	nagement Plan up	dated	<b>!</b> ? ⊠			The Tenant's EMP is documented.
1.4	a. Emergency Res documented?	ponse Plan (ERP)		$\boxtimes$			The Tenant's ERP is documented.
	b. Drill / training re	cords available?		$\boxtimes$			
1.5	Employee's trainin	g record available′	?	$\boxtimes$			
1.6	Any record of pros	ecution / complain	t?		$\boxtimes$		
1.7	Waste Manageme	nt Plan?		$\boxtimes$			The Tenant's WMP is documented.



	2. Water Quality				
	Description	Yes	No	N/A	Remarks
2.1	Valid Effluent Discharge License available?				Licence No. WT00007365-2010 valid until 31 Aug 2015.
2.2	Any wastewater treatment facility prior to effluent discharge?	$\boxtimes$			A screen has been installed as treatment device.
	If yes, facility is properly maintained and function normally?	$\boxtimes$			
2.3	Effluent Monitoring a. Sampling / Monitoring Record available?			$\boxtimes$	As per the discharge licence, self-monitoring shall be performed when required.
	b. Monitoring frequency met the license requirement?				
	c. Any exceedance?				
	d. If yes, follow-up action taken?			$\boxtimes$	
2.4	Surface run-off control measures in place and adequately maintained?			$\boxtimes$	
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?	$\boxtimes$			
2.8	Drainage system is well maintained to prevent flooding and overflow?	$\boxtimes$			



	Description	Yes	No	N/A	Remarks
	Processes with high Risk of Contamination				The risk of contamination for the recycling process is low.
2.9	a. Processes / activities are located under a covered area?				
	b. Stop-logs installed in the perimeter drainage system for uncovered areas?				Stop-logs are available for use by the Tenant if needed.
	c. Contaminated water collected in the surface drainage systems is treated at water treatment facility / other appropriate treatment facility?			$\boxtimes$	No contaminated water was found.
.10	Equipment oil and lubrication replacements are performed only in bunded maintenance area?				Not observed.
2.11	a. Oil interceptor provided for drainage discharging from maintenance area?			$\boxtimes$	Not required.
•	b. If yes, oil and grease removed regularly?				
•	c. Collected by licenced collector?			$\boxtimes$	
•	Cargo Handling			$\boxtimes$	Not required.
2.12	a. Cargo Handling Guideline available and followed to minimise chance of accidental spillage when loading or unloading?				
•	b. Materials and bulk cargo are properly packed?			$\boxtimes$	



	3. Air Quality				
	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?			$\boxtimes$	
3.2	Odour a. Any odour detected?		$\boxtimes$		
	b. If yes, can the source be identified?			$\boxtimes$	
	c. Odorous materials are covered?			$\boxtimes$	
	d. If odour control system is installed, is it operating normally?			$\boxtimes$	
3.3	All dusty materials are sprayed with water or covered by impervious sheeting prior to any loading, unloading or transfer operation?				No dusty materials were found to be used on-site.
3.4	Dust Monitoring a. Monitoring Record available?			$\boxtimes$	Not required.
	b. Monitoring frequency met the requirement?			$\boxtimes$	
	c. Any exceedance?			$\boxtimes$	
	d. If yes, follow-up action taken?			$\boxtimes$	
3.5	Enclosures are provided around the main dust-generating activities?			$\boxtimes$	
3.6	Open burning is avoided?	$\boxtimes$			



	3. Air Quality (continued)				
	Description	Yes	No	N/A	Remarks
3.7	Dark smoke emitted from chimney or powered plant is avoided?				There is no chimney installed onsite.
3.8	Vehicles and equipment are switched off while not in use?	$\boxtimes$			
3.9	Approval certificate issued by the Authority is available for furnace, oven or chimney consuming:  a. >25L of conventional liquid fuel per hour			$\boxtimes$	
	b. >35kg of conventional solid fuel per hour				
	c. >1,150 MJ of any gaseous fuel per hour			$\boxtimes$	
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?			$\boxtimes$	
3.11	Dust collected by any air pollution control equipment installed by tenants must be tested to ensure compliance for landfill disposal.			$\boxtimes$	
3.12	Approval from Authority for the use of controlled refrigerant?	$\boxtimes$			All relevant equipments are approved by EPD.
	b. If yes, record of refrigeration equipment service available?			$\boxtimes$	Recorded by EPD.
3.13	All air pollution control systems are properly maintained and function normally?				
3.14	Only Ultra-Low Sulphur Diesel is used?				



#### 4. Waste / Chemical Management **Description** Yes No N/A **Remarks Chemical Waste Producer Registration** 4.1 $\boxtimes$ Registration No. 9211-421completed? S3222-08 for spent lubricating oil, unwanted refrigerant and CRT. $\boxtimes$ 4.2 Provision of sufficient waste disposal points/ receptacles? $\boxtimes$ $\Box$ 4.3 Waste disposed of regularly and properly? Waste from workshop is stored in temporary area and disposed of as general refuse twice a week via the Operator. Chemical waste is transported to EPD's Chemical Waste Treatment Centre by licensed collector once per month. $\boxtimes$ 4.4 Sorting of materials on-site for reuse or Recyclable materials were disposal to designated outlet? passed to other recyclers. $\boxtimes$ П 4.5 Record of quantities of waste generated, recycled and disposed properly kept and easily retrieved for inspection? П П $\boxtimes$ Sludge is collected by a licensed collector at 4.6 regular intervals? $\boxtimes$ П Packaging of Chemical Waste a. Stored in suitable container? 4.7 b. Container properly closed or sealed? $\boxtimes$ c. Spillage cleaned up immediately through $\Box$ $\boxtimes$ No spillage. the use of an absorbent? d. Approval obtained for capacity of П $\boxtimes$ containers > 450L? $\boxtimes$ Labelling of Chemical Waste $\Box$ 4.8 a. Label is securely attached, clean and visible? $\boxtimes$ b. Label is in proper dimension and bilingual? $\boxtimes$ П c. Information is accurate and sufficient?



	Description	Yes	No	N/A	Remarks
9	Storage of Chemical Waste  a. Proper "Chemical Waste" signs are displayed?	$\boxtimes$			
-	b. Incompatible wastes separated by an impermeable partition?	$\boxtimes$			
	c. Containers kept in receptacle of suitable material and construction ( <i>if quantity</i> <50L) or drip trays capable of storing 110% of the volume of largest ( <i>if quantity</i> >50L)?	$\boxtimes$			
•	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?	$\boxtimes$			
•	f. Adequacy of area ventilation?	$\boxtimes$			
	g. Outdoors storage area should be covered?				
0	Chemical wastes are collected by a licensed chemical waste collector? (retention of trip ticket copies for 12 months)	$\boxtimes$			
1	Storage of Liquid Waste  a. Storage area floor/surface permeation-proof?			$\boxtimes$	No liquid waste was observed.
•	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?			$\boxtimes$	



	5. Other Issues				
	Description	Yes	No	N/A	Remarks
5.1	Landfill Gas Hazard (within LFG Consultation Zone) a. Workers and visitors alerted to possible LGF hazards?				The lot is within the LFG Consultation Zone and the Tenant has alerted workers/visitors about possible LFG hazards. A notice is also posted at the visitor centre.
	b. Smoking and open fires prohibited?	$\boxtimes$			
5.2	Security lighting directed downward into the work areas to prevent glare to the surrounding receivers?			$\boxtimes$	
5.3	Good housekeeping?	$\boxtimes$			
5.4	Any areas within the lot to be used for recycling processes are concrete paved?	$\boxtimes$			
5.5	Valid calibration certificate for any monitoring equipment?			$\boxtimes$	No monitoring equipment.
5.6	Dangerous Goods  a. Valid license for manufacturing / storing dangerous goods?			$\boxtimes$	There were no DGs stored on site.
	b. Storage area in compliance with the approved plan?			$\boxtimes$	
	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?			$\boxtimes$	
5.7	Potential stagnant pools cleared and mosquito breeding prevented?	$\boxtimes$			



# **Action Items from This Audit**

No. Action Expected By

1. No critical issues were identified. N/A

#### **Follow-up from Previous Audits**

No. Follow-up from Previous Audit Dated 21 March 2012

**Status** 

1. Nil. N/A

# **Audit Summary and Sign-off**

The site was generally tidy.

	ET	IEC*	Tenant	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	St. James	Serco Guardian JV
Signed By	Winnie MA	Enid YUNG	Ken FUNG	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Assistant Manager	Park Manager
Signature	Distre	26:16.	Pa	13





# **APPENDIX 7**

General EcoPark Checklists for the Reporting Quarter



### **Audit Details**

Date & Time	Date 22 Feb	ruary 2012	Time 9:30am to	11:20am
<b>Weather Conditions</b>	Fine	☐ Hazy		Rain
Wind	⊠ Calm	Light Breeze	☐ Strong Wind	
Temperature	<u>19</u> °C			
Humidity	Low	Medium		
(				

#### **Action Items from This Audit**

**ID ET Findings / Recommendations** 

# **Operator / Tenant Follow-up Action**

### Cosmos Star Holdings Co.

 Plant construction is resumed. No critical issues Nil were observed.



#### **Other Areas**

2. No new observations.

Nil

# **Follow-up from Previous Audits**

ID ET Findings / Recommendations Operator / Tenant Follow-up Action
Cosmos Star Holdings Co.

1. Nil Nil

**Other Areas** 

2. Nil Nil



# **Observations and Sign-off**

No critical issues were observed.

	ET	IEC*	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Serco Guardian JV
Signed By	Winnie MA	-	Morgan CHIU
Role	ET Site Auditor	IEC	Park Manager
Signature	Dista	-	1



#### **Audit Details**

Date & Time	Date 21 Mar	rch 2012	Time 9:30am to	o 11:20am
<b>Weather Conditions</b>	Fine		Overcast	Rain
Wind	Calm		☐ Strong Wind	
Temperature	<u>19</u> °C			
Humidity	Low		High	
\				

#### **Action Items from This Audit**

# ID ET Findings / Recommendations

# **Operator / Tenant Follow-up Action**

#### Cosmos Star Holdings Co.

1. The gate was closed during site audit and no construction activities were observed.

Nil



#### K. Wah Construction Products Ltd.

The gate was closed during site audit and no activities were observed.

Nil

#### SSK Metal Ltd.

The gate was closed during site audit and no activities were observed.

Nil

# **Chung Yue Steel Group Company Limited**

 The gate was closed during site audit and no activities were observed. Nil

#### E. Tech Management (HK) Ltd.

5. The gate was closed during site audit and no activities were observed.

Nil

# **Follow-up from Previous Audits**

ID ET Findings / Recommendations Operator / Tenant Follow-up Action

Cosmos Star Holdings Co.

1. Nil Nil

**Other Areas** 

2. Nil Nil



# **Observations and Sign-off**

No critical issues were observed.

	ET	IEC*	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Serco Guardian JV
Signed By	Winnie MA	-	Morgan CHIU
Role	ET Site Auditor	IEC	Park Manager
Signature	Distre	-	1



### **Audit Details**

Date & Time	Date 19 Apr	il 2012	Time 9:30am to	o 11:20am
<b>Weather Conditions</b>	Fine	☐ Hazy	Overcast	
Wind	Calm		☐ Strong Wind	
Temperature	20 °C			
Humidity	Low	Medium		

#### **Action Items from This Audit**

#### ID **ET Findings / Recommendations**

# **Operator / Tenant Follow-up Action**

#### Cosmos Star Holdings Co.

The gate was closed during site audit and no 1. construction activities were observed.

Nil



#### K. Wah Construction Products Ltd.

The gate was closed during site audit and no 2. activities were observed.

Nil

#### SSK Metal Ltd.

The gate was closed during site audit and no 3. Nil activities were observed.

# Chung Yue Steel Group Company Ltd.

4. The gate was closed during site audit and no activities were observed.

Nil

#### E. Tech Management (HK) Ltd.

The gate was closed during site audit and no 5. activities were observed.

Nil

# On Fat Lung Electrical & Metal Co. Ltd.

6. The gate was closed during site audit and no activities were observed.

Nil

Nil

# **Other Areas**

7. Nil



# **Follow-up from Previous Audits**

ID	ET Findings / Recommendations	Operator / Tenant Follow-up Action	1
1.	Cosmos Star Holdings Co. Nil	Nil	
2.	K. Wah Construction Products Ltd. Nil	Nil	
3.	SSK Metal Ltd. Nil	Nil	
4.	Chung Yue Steel Group Company Ltd. Nil	Nil	
5.	E. Tech Management (HK) Ltd. Nil	Nil	
6.	On Fat Lung Electrical & Metal Co. Ltd.	Nil	
7.	Other Areas Nil	Nil	

# **Observations and Sign-off**

No critical issues were observed.

	ET	IEC*	Operator
Organisation	SMEC Asia Ltd	Atkins China Ltd	Serco Guardian JV
Signed By	Winnie MA	Keith CHAU	Morgan CHIU
Role	ET Site Auditor	IEC Site Auditor	Park Manager
Signature	Line	Des	1