

**Contract No. : EP/SP/52/06**  
**Development of an EcoPark in Tuen Mun Area 38**

**ENVIRONMENTAL MONITORING AND AUDIT**

**MONTHLY EM&A REPORT for**

**MAY 2007**

**Environmental Pioneers & Solutions Limited**  
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## **APPROVAL SHEET**

DOCUMENT DATE: 31 May 2007

Prepared and Certified by: ET Leader (Environmental Pioneers & Solutions Limited)

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

Verified by: \_\_\_\_\_  
IEC

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

\* IEC – Independent Environmental Checker

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## **EXECUTIVE SUMMARY**

This is the eleventh monthly Environmental Monitoring and Audit (EM&A) Report for the Environmental Protection Department Contract No. EP/SP/52/06 entitled “Development of an EcoPark in Tuen Mun Area 38”. (Environmental Permit No. EP-226/2005)

This report contains the results and findings of site inspection activities and EM&A works carried out by the Environmental Team (ET) of the Works Contractor as required in the contract during May 2007.

The site activities in the reporting period mainly consisted of site formation, excavation works, construction of administration building, marine front management office and drainage and sewerage and finishing works, fitting outs and building services installation for administration building and marine front management office.

Water spraying by water truck on site area was observed for dust mitigation.

No substantial noise impact was noted by ET during weekly environmental site walks.

Disposal of inert C&D material was recorded. Water and oil were found accumulated at the bottom of oil and chemical waste storage cabinets and were required to be removed.

Landfill gas monitoring was carried out at site, Oxygen measurement results on 2, 9, 16 and 23 May 2007 exceeded the Action Level in accordance with the EM&A Manual. The Contractor was reminded to carry out the actions suggested in the EM&A Manual correspondingly for mitigation measure. The Contractor was reminded to check and recalibrate the instrument as soon as possible.

An environmental complaint against dust nuisance was recorded on 29 May 2007 at EcoPark site. An investigation was subsequently carried out to inspect the complaint and the Contractor had carried out necessary mitigation measures for dust control as recommended in the investigation report.

There were no notifications of summons or successful prosecution during May 2007.

The planned activities for June 2007 and July 2007 with regard to development of EcoPark consist of:

- 1) Excavation Works, Site Formation Works and Roadworks
- 2) Construction of Drainage, Sewerage and Watermain
- 3) Construction of Administration Building
- 4) Construction of Marine Front Management Office
- 5) Finishing Works, Fitting Outs and Building Services Installation for Administration Building and Marine Front Management Office

## **1. BASIC PROJECT INFORMATION**

### **1.1 Introduction**

This is the eleventh monthly Environmental Monitoring and Audit (EM&A) Report for the Environmental Protection Department Contract No. EP/SP/52/06 entitled “Development of an EcoPark in Tuen Mun Area 38”. The site layout plan is shown in Appendix 1. The report was prepared by the Environmental Team, Environmental Pioneers & Solutions Limited, of the Works Contractor, Kaden Construction Limited. The report is to be submitted to the Works Contractor, the Engineer and the Environmental Protection Department for the project.

This report presents the results of the environmental monitoring of the project activities conducted during the month of May 2007. This included regular site inspections once per week for verification of implementation of the mitigation measures as recommended in the EM&A Manual and the Contractor’s Environmental Management Plan (EMP).

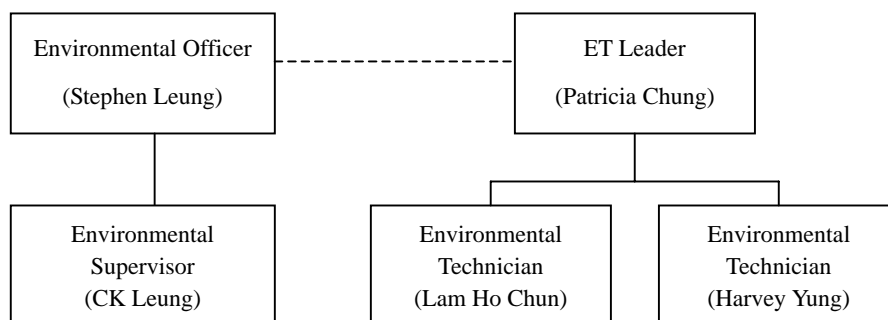
Phase 1 of the construction works has already commenced in July 2006 and is anticipated to complete in August 2007.

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

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

The Works Contractor has commissioned Environmental Pioneers & Solutions Limited as the Environmental Team, which comprises the environmental team leader and the environmental technicians to undertake the environmental monitoring and audit work for this project. The project Organization Chart of Environmental Team is shown in Figure 1.1.

Figure 1.1 Organization Chart of Environmental Team



## 2. SUMMARY OF WORK ACTIVITIES AND CONSTRUCTION STATUS

### 2.1 Works Undertaken during the Month

A summary of the site installation works in this month, with the information of locations, activities, equipment/materials and dates of occurrence, is provided by the Contractor, as shown in Table 2.1.

Table 2.1 Work Activities for May 2007		
Item	Work Activities & Location	Date of Occurrence
1	Site formation works, excavation works & roadworks	1 May 2007 – 31 May 2007
2	Construction of administration building and marine front management office	1 May 2007 – 31 May 2007
3	Construction of drainage, sewerage & water mains	1 May 2007 – 31 May 2007
4	Finishing works, fitting outs & building services installation for administration building & marine front management office	1 May 2007 – 31 May 2007

Machineries		
	Equipment/ Plant	Quantity
1	Mobile Crane	2
2	Excavator	14
3	Generator	4
4	Air Compressor	2
5	Roller	4
6	Loader	1
7	Grab Lorry	1
8	Crane Lorry	2
9	Water Truck	1
10	Dump Truck	2

Remarks:

- As informed by the Contractor, most equipment are mobile at site subject to work progress.
- Refer to Appendix 1 – Site layout plan for location of construction activities.

### 2.2 Future Key Issues

The Contractor has provided an updated construction program in Table 2.2 to show the planned activities for the coming three months (June 2007 – August 2007). The anticipated environmental issues are summarized as follow:



Table 2.2 Construction Program and Anticipated Environmental Issues		
Item	Works	Anticipated Environmental Issues
1	Site formation works, excavation works & roadworks	<ul style="list-style-type: none"> <li>- Generation of C&amp;D Waste; excavated material should be reused as much as practicable</li> <li>- Dust may be generated; the wheel washing machine should be in operation</li> <li>- Haul road should be sprayed regularly, by truck or sprinkler</li> <li>- Stagnant water should be removed</li> <li>- Mosquito mitigation measures should be implemented</li> </ul>
2	Construction of Administration Building and Marine Front Management Office	<ul style="list-style-type: none"> <li>- Generation of waste from packaging materials and C&amp;D wastes</li> </ul>
3	Construction of drainage, sewerage & water mains	<ul style="list-style-type: none"> <li>- Generation of C&amp;D Waste; excavated material should be reused as much as practicable</li> <li>- Dust may be generated; the wheel washing machine should be in operation</li> </ul>
4	Finishing works, fitting outs & building services installation for administration building & marine front management office	<ul style="list-style-type: none"> <li>- Generation of waste from packaging materials and C&amp;D wastes</li> </ul>

The site inspection schedule for the next month (June 2007) is designated on 6, 13, 20 and 27 June 2007.

### 3. STATUS OF ENVIRONMENTAL PROTECTION AND SITE INSPECTIONS

#### 3.1 Environmental Site Inspections

Environmental site inspections are required to inspect the construction activities of the Development of EcoPark in order to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented.

Site inspections were conducted on 2, 9, 16, 23 and 30 May 2007.

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

The findings and results of site inspections are provided in Table 3.1:

Date	Observations	Advice from ET	Outcome	Closing Date
24 April 07	Water and oil were found accumulated at the bottom of oil and chemical waste storage cabinets	To remove water and oil in order to prevent spillage	Accumulated water and oil were removed	9 May 07
2, 16 May 07	Water from manual wheel washing flowed into the existing gullies at site	To use sandbag for desilting at gullies	Sandbags were placed at gullies for desilting	23 May 07
9 May 07	Waste was found between profile barriers on road A	To remove the waste for better house keeping	Waste was removed	16 May 07
30 May 07	Stagnant water was found at the end of Road A	To remove the water to prevent mosquito breeding	To be observed and inspected in the next reporting period	--

#### 3.2 Air Dust

On 29 May 2007, the Environmental Team (ET) received a referral of a complaint concerning an environmental complaint against dust nuisance observed on 4 May 2007 at EcoPark site entrance. A joint investigation coordinated by ET with representatives from the Engineer, the Contractor and ET was carried out on 31 May 2007 to investigate the complaint. The investigation group found that there was no non-compliance in terms of dust pollution. Furthermore, ET has recommended the

following mitigation measures for more effective dust suppression at site:

#### Mitigation measures

1. Enhance water spraying by water truck on local works area.
2. Manual wheel washing at works site exits to minimize fugitive dust brought on roads.
3. Regular spraying and cleaning of road surface as well as enhance wheel washing at all local work site exits.
4. Better coordination with management contractor to ensure site tidiness.
5. More frequent visual inspection of in-out traffic from site.

ET will continue to monitor the performance of the mitigation measures carried out by the Contractor and will provide appropriate assistance and advice whenever necessary.

Water spraying by water truck on site area such as Road A and unpaved site area beside marine front was observed for dust mitigation.

Excavation work at Road F near site office was observed. The Contractor reopened the site exit at Road A where manual wheel washing was used. The site exit at Road F remained and manual wheel washing was used. As informed by the Engineer's Representative, no adverse comment to wheel washing of the Site has been received.

### 3.3 Noise

The major noise source was vehicle movement, machinery and rock excavation in the EcoPark. Since the nearby NSRs were remote, the noise impact was minimal. There was no specific observation noted regarding noise issue. The Construction Noise Permit was issued to the Contractor on 02 March 2007.

### 3.4 Surface Water Quality

Since there was no water discharge at manhole, the Contractor removed the silt curtain installed at discharge point on 4 April 2007, as agreed by the Engineer's Representative. No muddy water was observed at discharge point.

Chemical toilets (5 nos.) have been provided by a licensed contractor, of which sewage generated is collected every three to five days without causing contamination on surface water. The Effluent Discharge Licence was issued to the Contractor on 20 November 2006.

Wastewater from manual wheel washing was discharged into existing gullies at site. The Contractor is reminded to use sandbag to de-silt the water before discharge into the gullies.

### 3.5 Visual and Landscape Impact

Hoarding was erected at the site egress and aligned along the site boundary along Lung Mun Road. Hoardings were specially designed to be movable for future re-use in other locations.

During site clearance, trees were relocated to be replanted for landscaping in the future in EcoPark.

### 3.6 Waste / Chemical Waste

Water and oil were found accumulated at the bottom of oil and chemical waste storage cabinets. The Contractor was reminded to regularly remove water and oil in order to prevent spillage.

Used wooden pallets were found along Road A. The Contractor was reminded to remove wooden pallets for recycling and reuse.

The Contractor implemented visual inspection and distributed flyers/ notices to ensure all dump trucks have mechanical covers closed when leaving EcoPark site.

Separate waste collection bins were made available for collecting aluminum cans, waste paper and plastic bottles etc. The Contractor has provided the site layout plan for refuse collection points as shown in Appendix 3.

Two waste dumpers were used for the collection and storage of general waste. Temporary storage areas for waste metals and waste tyres were established.

The Contractor has provided sufficient drip trays for all (4 nos.) temporary electricity generators at site. These drip trays should be covered by tarpaulin sheet to minimize rainfall accumulation.

Excavated materials are reused as back-fill material to balance cut and fill and hence reduce the generation of materials. Surplus materials are returned to stock in centralized area with suitable protective measures. The Contractor was reminded to comply with the requirements and conditions for disposal at public fill facility and all oversized aggregates should be crushed to less than 250mm before delivering to the public fill.

Materials are recycled and re-used at site as much as practicable to minimize waste generation. Timbers are recycled to make temporary tools and assess ladders etc. Excavated rocks, concrete and asphalts are stored for future re-use in land formation and structural construction etc.

Registered waste collectors will be arranged to collect and transport the wastes whenever necessary.

Table 3.4 provides a summary table of waste disposal in May 2007. The Contractor has been reminded to keep good record at site in order to have a clear presentation of waste disposal.

Table 3.4 Summary of Waste Disposal in May 2007			
Type of Waste	Disposal Site	Quantity	Remarks
General Waste	WENT Landfill	56.65 tonnes	-
Inert C&D Material	Public Fill Facility	2391.6 tonnes	-

### 3.7 Landfill Gas

Landfill gas (LFG) monitoring was carried out on site at seven (7) locations, as instructed by the Engineer's Representative. LFG measurements are summarized in Table 3.5, and original field measurement sheets with measurement locations are appended in Appendix 4. Oxygen measurement results on 2, 9, 16 and 23 May 2007

exceeded the Action Level in accordance with the EM&A Manual, as shown in Table 3.6. The Contractor was reminded to conduct the actions suggested in the EM&A Manual correspondingly for mitigation measures.

Table 3.5 Summary of LFG Measurement for May 2007						
Sampling Location	Date of Measurement	Sampling Time	Weather Condition	Methane (CH <sub>4</sub> ) %LEL	Carbon Dioxide (CO <sub>2</sub> ) %LEL	Oxygen (O <sub>2</sub> )
Point A	02 May 07	1455	Sunny	0.0%	0.0%	18.2%
Point B1	02 May 07	1509	Sunny	0.0%	0.0%	17.9%
Point C1	02 May 07	1511	Sunny	0.0%	0.0%	17.8%
Point F	02 May 07	1504	Sunny	0.0%	0.0%	18.0%
Point G	02 May 07	1458	Sunny	0.0%	0.0%	18.1%
Point H	02 May 07	1501	Sunny	0.0%	0.0%	18.0%
Point I	02 May 07	1503	Sunny	0.0%	0.0%	18.0%
Point A	09 May 07	1525	Sunny	0.0%	0.0%	18.3%
Point B1	09 May 07	1533	Sunny	0.0%	0.0%	18.1%
Point C1	09 May 07	1535	Sunny	0.0%	0.0%	18.1%
Point F	09 May 07	1529	Sunny	0.0%	0.0%	18.2%
Point G	09 May 07	1527	Sunny	0.0%	0.0%	18.3%
Point H	09 May 07	Not Accessible				
Point I	09 May 07	Not Accessible				
Point A	16 May 07	1550	Sunny	0.0%	0.0%	18.4%
Point B1	16 May 07	1604	Sunny	0.0%	0.0%	18.1%
Point C1	16 May 07	1607	Sunny	0.0%	0.0%	17.8%
Point F	16 May 07	1555	Sunny	0.0%	0.0%	18.3%
Point G	16 May 07	1552	Sunny	0.0%	0.0%	18.4%
Point H	16 May 07	1559	Sunny	0.0%	0.0%	18.1%
Point I	16 May 07	1557	Sunny	0.0%	0.0%	18.2%
Point A	23 May 07	1515	Sunny	0.0%	0.0%	18.4%
Point B1	23 May 07	1530	Sunny	0.0%	0.0%	18.0%
Point C1	23 May 07	1533	Sunny	0.0%	0.0%	18.1%
Point F	23 May 07	1522	Sunny	0.0%	0.0%	18.3%
Point G	23 May 07	1518	Sunny	0.0%	0.0%	18.3%
Point H	23 May 07	1521	Sunny	0.0%	0.0%	18.3%
Point I	23 May 07	1524	Sunny	0.0%	0.0%	18.1%
Point A	30 May 07	1521	Sunny	0.0%	0.0%	20.1%
Point B1	30 May 07	1543	Sunny	0.0%	0.0%	20.2%
Point C1	30 May 07	1547	Sunny	0.0%	0.0%	20.2%
Point F	30 May 07	1531	Sunny	0.0%	0.0%	20.1%
Point G	30 May 07	1527	Sunny	0.0%	0.0%	20.2%

Table 3.5 Summary of LFG Measurement for May 2007

Sampling Location	Date of Measurement	Sampling Time	Weather Condition	Methane (CH <sub>4</sub> ) %LEL	Carbon Dioxide (CO <sub>2</sub> ) %LEL	Oxygen (O <sub>2</sub> )
Point H	30 May 07	1537	Sunny	0.0%	0.0%	20.2%
Point I	30 May 07	1534	Sunny	0.0%	0.0%	20.2%
Point A	30 May 07	1519	Sunny	0.0%	0.0%	18.2%
Point B1	30 May 07	1542	Sunny	0.0%	0.0%	17.5%
Point C1	30 May 07	1546	Sunny	0.0%	0.0%	17.5%
Point F	30 May 07	1529	Sunny	0.0%	0.0%	17.6%
Point G	30 May 07	1526	Sunny	0.0%	0.0%	17.8%
Point H	30 May 07	1536	Sunny	0.0%	0.0%	17.6%
Point I	30 May 07	1533	Sunny	0.0%	0.0%	17.6%

**Remarks:**

As requested by the Engineer's Representative, the ET has carried out landfill gas (LFG) monitoring with another LFG measurement instrument on 30 May 2007 for the purpose of counterchecking the results of oxygen measurement taken from the LFG measurement instrument (GEM2000) provided by the Contractor. It was shown that the results of oxygen measurement (17.5% - 18.2%) from the Contractor's LFG instrument were lower than those (20.1% - 20.2%) from the ET's LFG instrument. The Contractor was reminded to check and recalibrate the instrument as soon as possible.

Table 3.6 Action Levels, Limit Levels and Event and Action Plan for LFG (From EM&amp;A Manual)

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

#### 4. SUMMARY OF ENVIRONMENTAL PERMIT AND LICENCES

ET has checked with the Contractor for the status of all environmental permits and licenses for this project as at May 2007, which is summarized in Table 4.1. ET will follow the application process of the outstanding permits / licenses and will provide suitable assistance whenever appropriate.

Table 4.1 Summary of Environmental Permits/ Licences				
Description	License / Permit No.#	Date of Issue	Date of Expiry	Status/Remarks
Environmental Permit	EP-226/2005	9-Sept-2005	--	Issued
Registration of Waste Producer	5111-421-K2869-02	27-Jul-2006	--	Issued
Construction Noise Permit	GW-RW0080-07	02-Mar-2007	28-Aug-2007	Issued
Effluent Discharge Licence	EP760/421/011762/I	20-Nov-2006	1-Dec-2011	Issued

#### 5. CUMULATIVE LOG OF COMPLAINTS AND REMEDIAL ACTION

The cumulative log of complaints is referred in Appendix 5.

#### 6. CUMULATIVE LOG OF NOTIFICATION OF SUMMONS AND PROSECUTIONS

No notification of summons and no prosecutions occurred during May 2007.

#### 7. CONCLUSION

There is no summon nor prosecutions reported during May 2007.

Water spraying by water truck on site area was observed for dust mitigation.

Daily landfill gas monitoring was carried out by the Contractor on site and some results of oxygen measurement exceeded Action and Limit levels in accordance with EM&A Manual. The Contractor was reminded to conduct the actions suggested in the EM&A Manual correspondingly for mitigation measure.

The Contractor has been using the waste management and record system including



allocation of waste storage areas and the trip ticket system as proposed in the Environmental Management Plan.

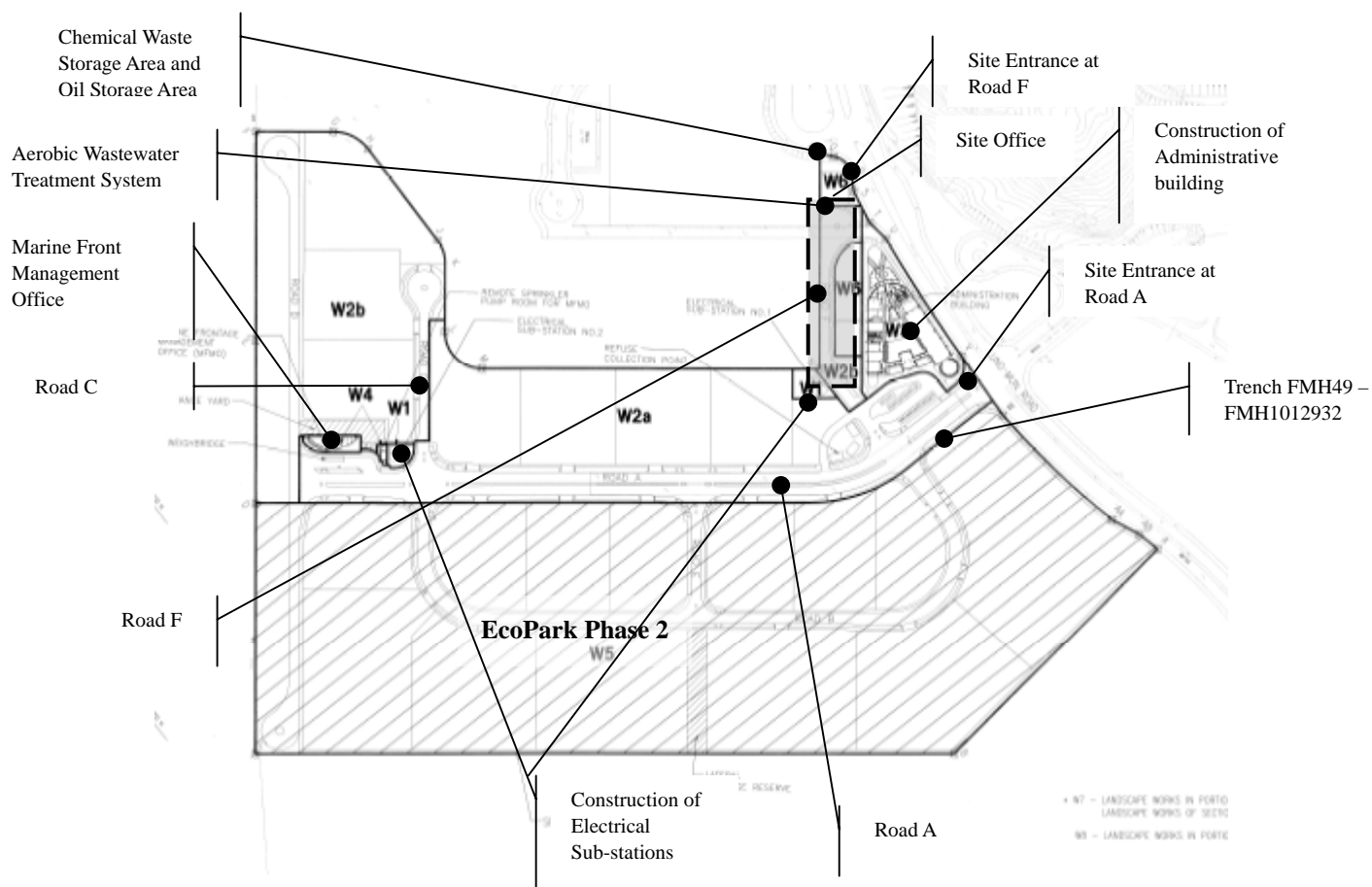
Water and oil were found accumulated at the bottom of oil and chemical waste storage cabinets. The Contractor was reminded to remove water and oil from cabinets.

General waste and packaging materials were found at profile barriers on Road A. The Contractor has to remove general waste and packaging materials for better house keeping.

An environmental complaint was received concerning dust nuisance at site entrance. The Contractor should continuously implement mitigation measures for site dust control, including measures such as Enhance water spraying by water truck, Manual wheel washing at works site exits, more frequent visual inspection of in-out traffic from site etc.

The Contractor was advised to pay more efforts on environmental concerns and awareness such as site tidiness and mosquito hazard from stagnant water at site.

## APPENDIX 1 - SITE LAYOUT PLAN

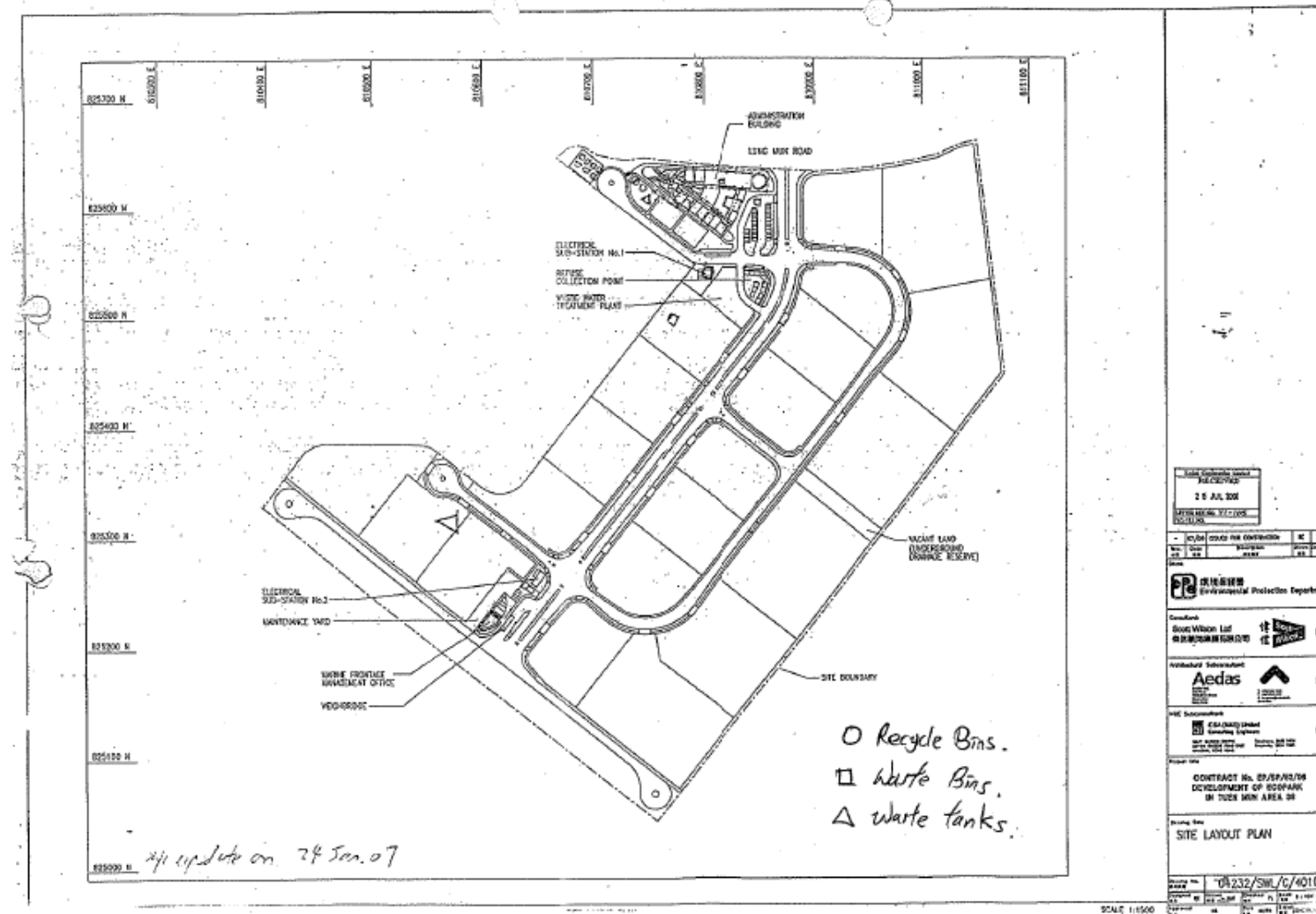


**APPENDIX 2 - THE CONTACT PERSONS, TELEPHONE NUMBERS OF KEY PERSONNEL FOR DEVELOPMENT OF AN ECOPARK IN TUEN MUN AREA**

**38**

<b>Company/Department</b>	<b>Name</b>	<b>Position</b>	<b>Telephone</b>
Scott Wilson Ltd.	Mike Bains	Independent Environmental Checker	--
Scott Wilson Ltd.	Mr. Michael Lo	Senior Resident Engineer	6290 8860
Scott Wilson Ltd.	Mr. Andy Cheung	Resident Engineer	6111 9703
Scott Wilson Ltd.	Mr. C S Lam	Senior Inspector of Works	9861 8011
Kaden Construction Limited	Mr. K M Book	Project Manager	9193 8680
Kaden Construction Limited	Mr. Stephen Leung	Section Agent	9071 7657
Environmental Pioneers & Solutions Limited	Miss. Patricia Chung	Environmental Team Leader	2185 0123
Environmental Pioneers & Solutions Limited	Mr. Harvey Yung	Environmental Technician	2185 0172
Environmental Pioneers & Solutions Limited	Mr. Lam Ho Chun	Environmental Technician	2185 0154

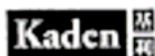
### APPENDIX 3 – SITE LAYOUT PLAN FOR REFUSE COLLECTION POINTS



**APPENDIX 4 - ORIGINAL LANDFILL GAS FIELD MEASUREMENT  
RECORDING SHEETS**

Kaden 嘉頓		Kaden Construction Limited		EPD Contract No. EP/SP/52/06		Job No. K0603	
				Development of EcoPark in Tuen Mun Area 38			
Daily Air Monitoring 每日空氣監測記錄							
Detector: 測試器	Model 型號: GEM 2000	Last calibration 上次檢測: 03 Apr. 07					
	S/N 編號: GM-08793	Next calibration 下次檢測: 02 Apr. 08					
Date of Monitor 監測日期: 2 May 2007				Performed by: Harry Lam			
Location 位置	Time 時間 (hrs)	Result 結果					
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure (mmHg)	
Point A	1455	0	0	18.2	81.7	29.79	
Point B1 (Production Gallery)	1509	0	0	17.9	82.0	29.79	
Point C1 (FMH049)	1511	0	0	17.8	82.1	29.79	
Point F (E&M room)	1504	0	0	18.0	81.9	29.79	
Point G (PS room)	1458	0	0	18.1	81.8	29.79	
Point H (E&M room)	1501	0	0	18.0	81.9	29.79	
Point I (E&M room)	1503	0	0	18.0	81.9	29.79	

Site layout



Kaden Construction Limited

EPD Contract No. EP/SP/52/06

Job No. K0603

Development of EcoPark in Tuen Mun Area 38

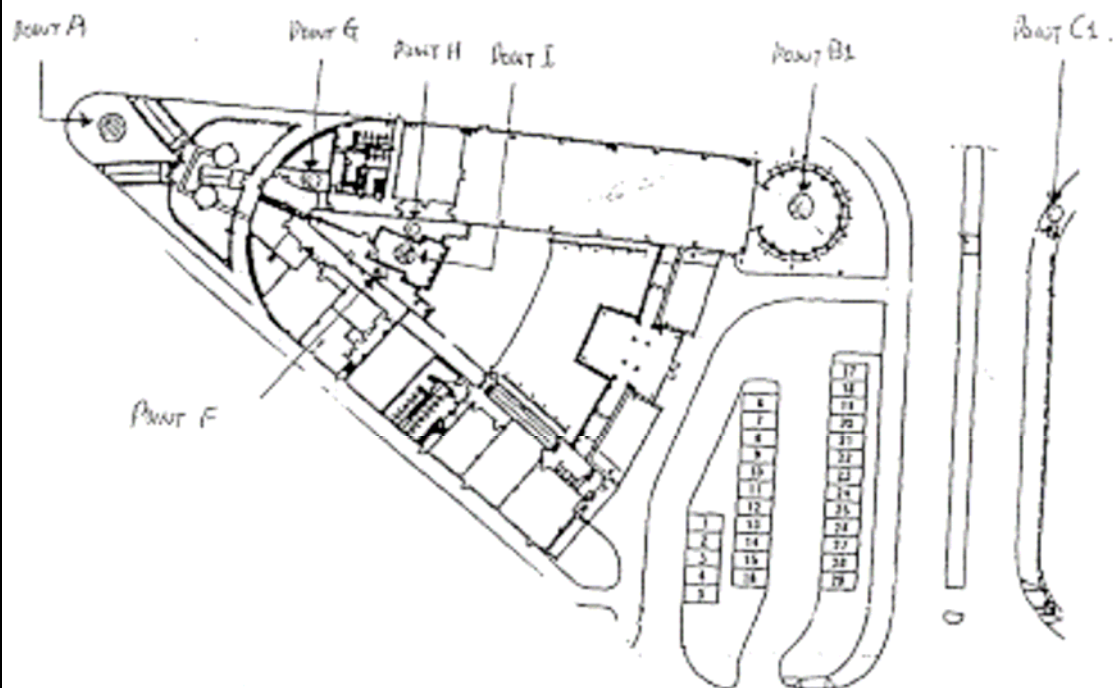
## Daily Air Monitoring 每日空氣監測記錄

Detector:	Model 型號: GEM 2000	Last calibration 上次檢測: 03 Apr. 07
測試器	S/N 編號: GM-08793	Next calibration 下次檢測: 02 Apr. 08

Date of Monitor 監測日期: 9 - 5 - 2007 Performed by: Harry Lam

Location 位置	Time 時間 (hrs)	Result 結果				
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure (mmHg)
Point A	1526	0	0	18.3	81.6	29.82
Point B1 (Production Gallery)	1533	0	0	18.1	81.9	29.82
Point C1 (FMH049)	1535	0	0	18.1	81.8	29.82
Point F (E&M room)	1529	0	0	18.2	81.7	29.82
Point G (FS room)	1527	0	0	18.3	81.7	29.82
Point H (E&M room)		not accessible				
Point I (E&M room)		not accessible				

Site layout





Kaden Construction Limited

EPD Contract No. EP/SP/52/06

Job No. K0603

Development of EcoPark in Tuen Mun Area 38

## Daily Air Monitoring 每日空氣監測記錄

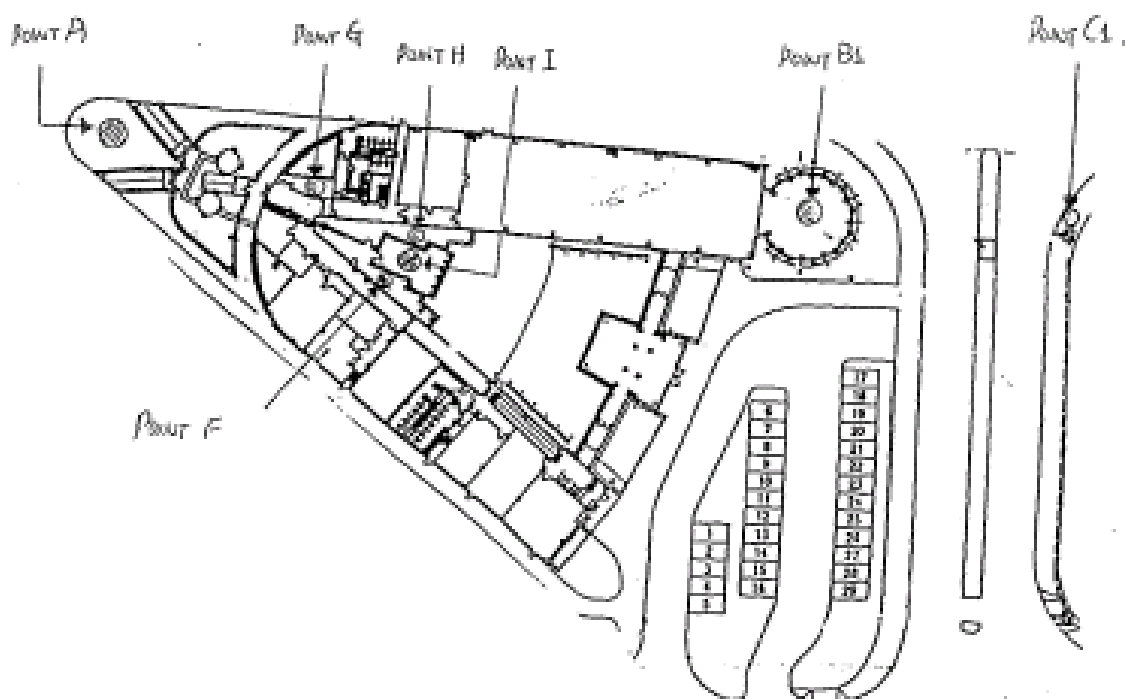
Detector: 測試器	Model 型號: GEM 2000	Last calibration 上次檢測: 03 Apr. 07
	S/N 編號: GM-08793	Next calibration 下次檢測: 02 Apr. 08

Date of Monitor 監測日期: 16 - 5 - 2007

Performed by: Harry Lam

Location 位置	Time 時間 (hrs)	Result 結果				
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure (mmHg)
Point A	1550	0	0	18.4	81.5	29.72
Point B1 (Production Gallery)	1604	0	0	18.1	81.9	29.72
Point C1 (FMH049)	1607	0	0	17.8	82.1	29.72
Point F (E&M room)	1555	0	0	18.3	81.6	29.72
Point G (FS room)	1552	0	0	18.4	81.6	29.72
Point H (E&M room)	1559	0	0	18.1	81.8	29.72
Point I (E&M room)	1557	0	0	18.2	81.7	29.72

Site layout





Kaden Construction Limited

EPD Contract No. EP/SP/52/06

Job No. K0603

Development of EcoPark in Tuen Mun Area 38

## Daily Air Monitoring 每日空氣監測記錄

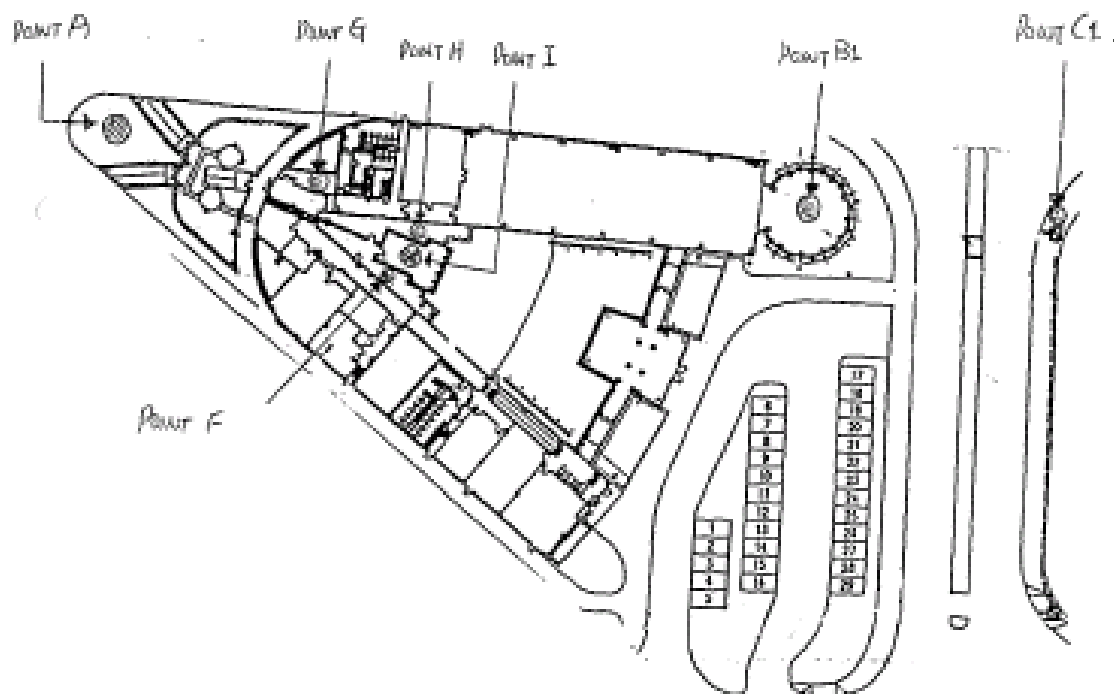
Detector: Model 型號: GEM 2000	Last calibration 上次檢測: 03 Apr. 07
測試器 S/N 編號: GM-08793	Next calibration 下次檢測: 02 Apr. 08

Date of Monitor 監測日期: 23 - 5 - 2007

Performed by: Harry Lam (EPD)

Location 位置	Time 時間 (hrs)	Result 結果				
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure ("Hg)
Point A	1515	0	0	18.4	81.5	29.53
Point B1 (Production Gallery)	1530	0	0	18.0	81.9	29.53
Point C1 (FMH49)	REPEATED					
Point F (E&M room)	1522	0	0	18.3	81.6	29.53
Point G (FS room)	1518	0	0	18.3	81.7	29.53
Point H (E&M room)	1521	0	0	18.3	81.6	29.53
Point I (E&M room)	1524	0	0	18.1	81.9	29.53

Site layout Point C1 (FMH49) 1533 0 0 18.1 81.9 29.53





**Kaden** 基頓  
Kaden Construction Limited  
EPD Contract No. EP/SP/52/06 Job No. K0603  
Development of EcoPark in Tuen Mun Area 38

**Daily Air Monitoring 每日空氣監測記錄**

Detector: Model 型號: Gas Analyser GA2000 Last calibration 上次檢測:                       
測試器 S/N 編號: GA 07586104 Next calibration 下次檢測:                     

Date of Monitor 監測日期: 30-5-2007 Performed by: Harry Lam (EPS)

Location 位置	Time 時間 (hrs)	Result 結果				
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure Baro. Pressure (mbar)
Point A	1521	0	0	20.1	79.8	1005
Point B1 (Production Gallery)	1543	0	0	20.2	79.8	1005
Point C1 (FMH049)	1547	0	0	20.2	79.8	1005
Point F (E&M room)	1531	0	0	20.1	79.8	1005
Point G (FS room)	1527	0	0	20.2	79.8	1005
Point H (E&M room)	1537	0	0	20.2	79.8	1005
Point I (E&M room)	1534	0	0	20.2	79.8	1005

Site layout

The diagram is a hand-drawn site layout of an industrial facility. It shows a large rectangular building with several internal divisions. Monitoring points are marked with dots and labeled: Point A is at the top left corner; Point G is on the top edge of the main building; Point H and Point I are on the top edge of a smaller section to the right of the main building; Point B1 is on the right edge of the main building; Point C1 is further to the right, near a vertical structure. Below the main building, there are two large rectangular storage tanks, each with a vertical list of numbers (1-24) on its side. Point F is located near the bottom left of the main building. To the right of the tanks, there are two more vertical structures, possibly chimneys or stacks, with monitoring points indicated by dots.

Landfill Gas Measurement by using ET's Instrument

**Kaden** 加頓 Kaden Construction Limited

EPD Contract No. EP/SP/52/06 Job No. K0603

Development of EcoPark in Tuen Mun Area 38

**Daily Air Monitoring 每日空氣監測記錄**

Detector: 測試器	Model 型號: GEM 2000	Last calibration 上次檢測: 03 Apr. 07
	S/N 編號: GM-08793	Next calibration 下次檢測: 02 Apr. 08

Date of Monitor 監測日期: 30 - 5 - 2007 Performed by:

Location 位置	Time 時間 (hrs)	Result 結果				
		CH <sub>4</sub> (%)	CO <sub>2</sub> (%)	O <sub>2</sub> (%)	Bal. Gas (%)	Baro. Pressure (mmHg)
Point A	1519	0	0	18.2	81.8	29.76
Point B1 (Production Gallery)	1542	0	0	17.5	82.4	29.76
Point C1 (FMH049)	1546	0	0	17.5	82.4	29.76
Point F (E&M room)	1529	0	0	17.6	82.3	29.76
Point G (FS room)	1526	0	0	17.8	82.1	29.76
Point H (E&M room)	1536	0	0	17.6	82.3	29.76
Point I (E&M room)	1533	0	0	17.6	82.4	29.76

Site layout

Landfill Gas Measurement by using the Contractor's Instrument

**APPENDIX 5 – CUMULATIVE LOG OF COMPLAINTS****CUMULATIVE LOG OF COMPLAINTS**

<b>Environmental Parameters</b>	<b>No. of Outstanding Complaints</b>	<b>No. of complaints received in May 2007</b>	<b>Cumulative no. of complaints received since the commencement of project</b>
Air	0	1	2
Noise	0	0	0
Water	0	0	0
Waste	0	0	0
Total	0	0	2

**DETAILS OF COMPLAINTS AND REMEDIAL ACTIONS**

<b>Log Ref.</b>	<b>Date of Compliant received</b>	<b>Location</b>	<b>Complainant /Date</b>	<b><u>Details of Complaint</u></b>	<b>Investigation /Mitigation Action</b>	<b>Investigated by/ Date</b>
EP-C-01/06	5 Sept 06	Site Entrance	Dust / 1 Sept 06	Complaint against dust emission from vehicles driving in or out of EcoPark	Causes of problems identify as: 1) Inadequate cover of excavated material stockpile. 2) Accumulating silt on haul road. 3) Ineffective water spraying of site haul/ access roads Mitigation Actions: 1) Provide sprinkler system for areas that cannot be accessed by water truck. 2) To enhance and increase spraying frequency by water truck. 3) Silt deposited on main haul road should be removed regularly. 4) Stockpiles of excavated materials should be covered with tarpaulin sheets. 5) Use granular fill to pave access roads.	Environmental Team / 7 Sept 06
EP-C-02/07	29 May 07	Site Entrance at Road F	Dust/ 4 May 07	Dust emission at the exit of the EcoPark caused by movement of vehicles; the dust emitted caused a nuisance to people at the nearby bus stop	Investigation: 1) Site exit has since been moved to Road A, further away from the bus stop. Mitigation measures: 1) Enhance water spraying by water truck on local works area. 2) Manual wheel washing at works site exits to minimize fugitive dust brought on roads. 3) Regular spraying and cleaning of road surface as well as enhance wheel washing at all local work site exits. 4) Better coordination with management contractor to ensure site tidiness. 5) More frequent visual inspection of in-out traffic from site.	Environmental Team / 31 May 07