

CLP Power Hong Kong Ltd

Renewable Energy Supply on  
Town Island (Construction  
Phase): *9th Monthly  
Environmental Site Audit Report*

December 2011

**Environmental Resources Management**


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Reference 0129569

For and on behalf of ERM-Hong Kong, Limited	
Approved by:	Frank Wan
Signed:	
Position:	Partner
Certified by :	Winnie Ko
Signed :	
Position :	Independent Environmental Checker
Date :	19 December 2011

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# 1 ENVIRONMENTAL SITE AUDIT

## 1.1 BACKGROUND

The construction works of *Renewable Energy Supply on Town Island* (the Project) has commenced in March 2011.

To fulfill Condition 2.2 of the Environmental Permit (EP-397/2010) and environmental audit requirements stated in Section 5.7.1 of the approved Project Profile (PP) submitted for direct application of an Environmental Permit under EIA Ordinance (EIAO) (PP-413/2010), monthly environmental site audits should be undertaken to ensure that the mitigation measures recommended in PP are properly implemented.

This is the ninth *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 14 December 2011.

## 1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The ninth monthly environmental site audit was conducted on 14 December 2011. Site clearance works were conducted at Site 1 and land surveying works were undertaken at Site 2 during the reporting period. All the temporary worksites have been reinstated. Four observations were recorded during the site audit and are described below:

- Environmental permit was not displayed at Site 1. The Contractor was reminded to display the Environmental Permit at the work sites. The Environmental Permit has been displayed at Site 1 on 16 December 2011 (Photo 6) as reported by the Contractor.
- Exposed soil surface was observed dusty at Site 1 after site clearance works (Photo 1). The Contractor was reminded to regularly wet the exposed surface of the site to avoid generation of dust.
- The excavated material was observed not being covered at Site 1 (Photo 2). The Contractor was reminded to properly cover the excavated material by impervious sheet. The excavated material has been covered by impervious sheet on 16 December 2011 (Photo 7) as reported by the Contractor.
- Soil which contaminated by spray paint was observed mixed with excavated soil at Site 1 (Photo 3). The Contractor was reminded to separate the contaminated soil from excavated soil and dispose of it as chemical waste.

The remedial actions for the two environmental deficiencies which were recorded during the previous reporting period has been taken and verified during the site inspection:

- Plastic warning tapes tied on trees at the temporary worksite for underground pipe and cabling works has been removed (Photo 4).
- The paint marking on soil and grassland at the temporary worksite for underground pipe and cabling works has been removed and the work sites has been reinstated (Photo 5).

The environmental site audit checklist is appended in *Annex A*.

Photos of the site audit are given in *Annex B*.

Annex A

# Environmental Site Audit Checklist



Renewable Energy Supply on Town Island  
Construction Phase - Environmental Site Audit



Inspection Date: 12-14-2011 Time: 10:00 to 11:00

Inspected By: IEC Representative : Andrew Fung  
 CLP Representative : Raymond Ho  
 Contractor : Rebel Hul (3Tech Corporate Ltd.)

**Weather**

Condition  Sunny  Fine  Overcast  Drizzle  Rain  Storm  Hazy  
 Temperature 20 °C Humidity  High  Moderate  Low  
 Wind  Calm  Light  Breeze  Strong

**A General**

	Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
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A1 Is the Environmental Permit displayed at the entrances / exits?     Note 1

**B Air Quality**

	Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
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B1 Is open burning avoided?     \_\_\_\_\_  
 B2 Are exposed soil surfaces regularly watered to avoid generation of dust?     Note 2  
 B3 Are plant and equipment well maintained? (ie without black smoke from powered plant)     \_\_\_\_\_  
 B4 Are stockpiles of dusty material covered or regularly watered?     Note 3  
 B5 Is watering implemented during excavation?     \_\_\_\_\_  
 B6 Is generation of dust avoided during loading/unloading/excavation?     \_\_\_\_\_

**C Noise**

	Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
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C1 Is the Construction Noise Permit displayed at the entrances / exits (if any)     \_\_\_\_\_  
 C2 Are all plant and equipment well maintained and in good operating condition?     \_\_\_\_\_  
 C3 Is idle equipment turned off or throttled down?     \_\_\_\_\_  
 C4 Are powered mechanical equipment covered or shielded by acoustic materials?     \_\_\_\_\_  
 C5 Are silenced equipment used where practicable?     \_\_\_\_\_  
 C6 Is the number of construction plant being used minimized?     \_\_\_\_\_  
 C7 Do air compressors have valid noise labels?     \_\_\_\_\_  
 C8 Do compressors operate with doors closed?     \_\_\_\_\_

**D Water Quality**

	Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
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D1 Is wastewater discharge license, if any, available for inspection?     \_\_\_\_\_  
 D2 Is drainage system adequate?     \_\_\_\_\_  
 D3 Is drainage system well maintained?     \_\_\_\_\_  
 D4 Is debris and rubbish in the drainage system collected and disposed of properly?     \_\_\_\_\_

D5	Are there temporary ditches for runoff discharge into appropriate Watercourse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	With silt retention pond?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D6	Are there sedimentation tanks for settling runoff prior to disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D7	Is the capacity of sedimentation tank adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D8	Is the sedimentation free from silt and sediment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D9	Are the temporary stockpiles located away from stream or coastline?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D10	Are treaching carried out for the section of cable in the vicinity of and crossing the stream between Sites 1 and 2?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D11	Is cable trenching works scheduled to be carried out during dry season?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

E Waste/Chemical Management		Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
<b>General refuse</b>						
E1	Accumulation avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E2	Receptacles (e.g. rubbish bins) available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E3	Disposed of regularly and properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Chemical waste, waste oil</b>						
E4	Is the Chemical Waste Producer Registration available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E5	Stored properly in designated area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E6	Labelled properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E7	Disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E8	Trip tickets/ chits available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Chemical/fuel storage area</b>						
E9	Are all spillage containment provided for all chemicals, oils and fuels stored on site, those equipment which potentially have oil leakage and for the area where maintenance works carrying out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E10	Is storage area bunded?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E11	Adequate bund capacity? (>110% of the largest tank)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E12	Are storage areas provided with locks and located on sealed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Construction Waste</b>						
E13	Reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Is sorting conducted on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 4
E14	Transported offsite by boat for proper disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E15	Are surplus inert materials being reused where practical as an alternative to ordering imported fill material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<b>Excavated Material</b>						
E16	Appears uncontaminated? (colour, odour)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E17	If suspected contaminated, appropriate procedures followed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
E18	Relevant license/permit/trip tickets/chits for disposal of construction waste or excavated materials available for inspection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

F General / Housekeeping		Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
F1	Are potential stagnant pools cleared and mosquito breeding prevented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

G Ecology		Yes	Yes, but need Improvement	No	N/A or not observed	Photo/Remarks
G1	Is damage and disturbance to the remaining and surrounding natural shrubby grassland and young woodland habitats avoided? (particularly those caused by filling and illegal dumping)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



G2	Is damage to surrounding areas avoided?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
G3	Are temporary work sites/disturbed areas reinstated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
G4	Is disturbance to streams avoided during cable laying?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
G5	Is any alternative method adopted for laying cable across stream between Sites 1 and 2?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

**Items for Inspection**

- Site 1 (Site clearance works.)
- Temporary worksite for underground pipe and cabling works (No construction work, worksite has been reinstated.)
- Site 2 (No construction work. Land surveying been conducted)

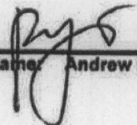
**Notes / Issues Recorded On Site**

- 1) Environmental permit was not displayed at the construction site at Site 1.
- 2) Exposed soil surface was observed dusty at Site 1 after site clearance works.
- 3) The excavated material was observed not being covered at Site 1.
- 4) Soil which contaminated by paint was observed mixed with excavated soil at Site 1.


**Corrective Actions**

- 1) The Contractor was reminded to display the Environmental Permit at the work sites before 16 December 2011.
- 2) The Contractor was reminded to regularly wet the exposed surface of the site to avoid generation of dust.
- 3) The Contractor was reminded to properly cover the excavated material before 16 December 2011.
- 4) The Contractor was reminded to separate the contaminated soil from excavated soil and dispose of it properly.

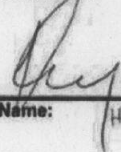
**Signatures:**  
IEC Representative :

  
(Name: Andrew Fung )

CLP Representative :

  
(Name: Raymond Ho )

Contractor :

  
(Name: Henry Lee )

Annex B

## Photo Records

**Photo Records on 14 December 2011**



Photo 1 – Exposed soil surface was observed dusty at Site 1 after site clearance works.



Photo 2 – The excavated material was observed not being covered at Site 1.



Photo 3 – Soil which contaminated by spray paint was observed mixed with excavated soil at Site 1.



Photo 4 – Plastic warning tapes tied on trees at the temporary worksite for underground pipe and cabling works has been removed.



Photo 5 – The paint marking on soil and grassland at the temporary worksite for underground pipe and cabling works has been removed and the work sites has been reinstated.

**Photo Records recorded by the Contractor on 16 December 2011**

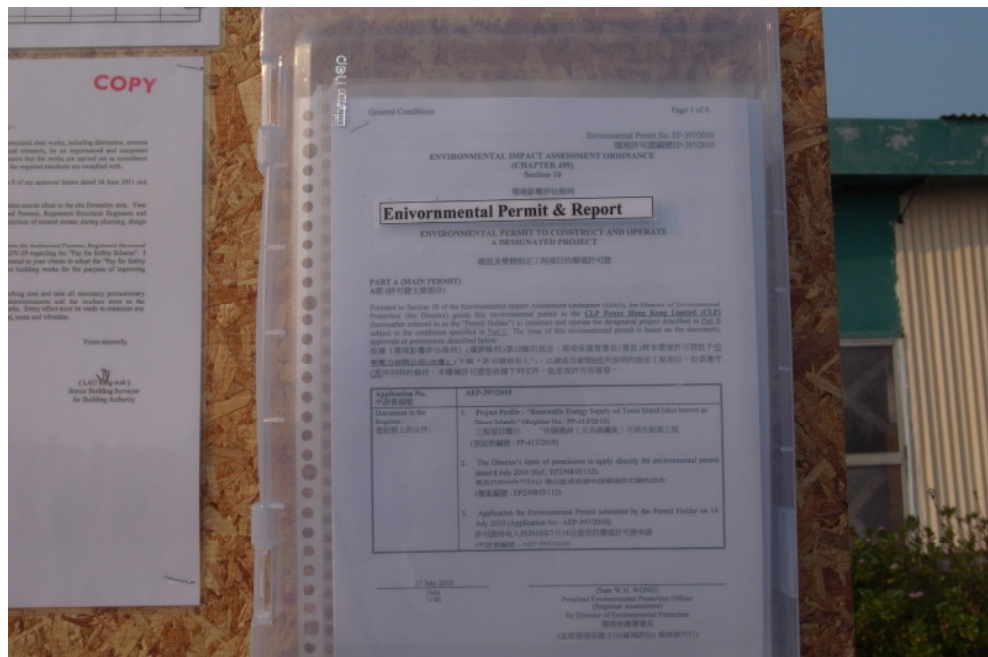


Photo 6 – The Environmental Permit has been displayed at Site 1.



Photo 7 – The excavated material has been covered by impervious sheet.