

CLP Power Hong Kong Ltd

Renewable Energy Supply on  
Town Island (Construction  
Phase): *3rd Monthly  
Environmental Site Audit Report*

June 2011

**Environmental Resources Management**



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Environmental Site Audit Report*

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Reference 0129569

For and on behalf of ERM-Hong Kong, Limited	
Approved by:	<u>Frank Wan</u>
Signed:	
Position:	<u>Partner</u>
Certified by :	<u>Roger Leung</u>
Signed :	
Position :	<u>Independent Environmental Checker</u>
Date :	<u>24 June 2011</u>

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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 third *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 14 June 2011.

## 1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The third monthly environmental site audit was conducted on 14 June 2011. The construction works have commenced. All mitigation measures have been implemented in full except for a few areas described below.

- The environmental permit could not be taken out from the plastic box folder as the documents inside the folder were too thick (See Photo 1 in Annex B). The Contractor was suggested to add one more plastic box folder for the environmental permit within one week.
- Stagnant water was also observed on the tarpaulin sheets covering the stockpiles at Site 1 (See Photo 2 in Annex B). The Contractor has been reminded to remove the stagnant water immediately.
- Erosion was observed at the worksite for underground pipe and cabling works and eroded soil was accumulated at low-lying area (See Photo 3 in Annex B). The Contractor was recommended to add sand bags to act as slit trap to prevent eroded soil being washed away to low-lying area within one week.

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: 14-06-2011 Time: 10:00 to 11:00

Inspected By: IEC Representative : Andrew Fung  
 CLP Representative : Raymond Ho  
 Contractor : K. Q. Cheung

**Weather**

Condition  Sunny  Fine  Overcast  Drizzle  Rain  Storm  Hazy  
 Temperature 31 °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

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

B1 Is open burning avoided?      
 B2 Are exposed soil surfaces regularly watered to avoid generation of dust?      
 B3 Are plant and equipment well maintained? (ie without black smoke from powered plant)      
 B4 Are stockpiles of dusty material covered or regularly watered?      
 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

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

D1 Is wastewater discharge license, if any, available for inspection?     Note 3  
 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
General refuse						
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"/>	_____
Chemical waste, waste oil						
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"/>	_____
Chemical/fuel storage area						
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"/>	_____
Construction Waste						
E13	Reused where practicable?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Is sorting conducted on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
E14	Transported offsite by boat for proper disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	_____
Excavated Material						
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 2

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?     \_\_\_\_\_
- G4 Is disturbance to streams avoided during cable laying?     \_\_\_\_\_
- G5 Is any alternative method adopted for laying cable across stream between Sites 1 and 2?     \_\_\_\_\_

**Items for Inspection**

- Site 1.
- Worksite for underground pipe and cabling works.

**Notes / Issues Recorded On Site**

- 1 Environmental permit could not be taken out from the plastic box folder as the documents inside the box folder were too thick.
- 2 Stagnant water was observed on the tarpaulin sheet at site 1.
- 3 Erosion was observed at the worksite for underground pipe and cabling works and eroded soil was accumulate at low-lying area.

**Corrective Actions**

- 1 The Contractor was suggested to add one more plastic box folder for the environmental permit within one week.
- 2 The Contractor was reminded to remove the stagnant water immediately.
- 3 The Contractor was suggested to add sand bags to act as silt trap to prevent eroded soil being washed away to low-lying area within one week.

**Signatures:**

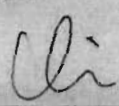
IEC Representative :

CLP Representative :

Contractor :

  
 (Name: Andrew Fung )

  
 (Name: Raymond Ho )

  
 (Name: K. Q. Cheung )



Annex B

## Photo Records

Photo Records on 11 May 2011



Photo 1 - The environmental permit and other documents were too thick and could not be taken out from the box folder.



Photo 2 - Stagnant water was observed on the tarpaulin sheet covering the stockpile located at Site 1.



Photo 3 – Erosion was observed at the worksite for underground pipe and cabling works and eroded soil was accumulated at low-lying area.