

CLP Power Hong Kong Ltd

Renewable Energy Supply on  
Town Island (Construction  
Phase): *1st Monthly  
Environmental Site Audit Report*

April 2011

**Environmental Resources Management**

21/F Lincoln House  
979 King's Road  
Taikoo Place  
Island East, Hong Kong  
Telephone: (852) 2271 3000  
Facsimile: (852) 2723 5660  
E-mail: [post.hk@erm.com](mailto:post.hk@erm.com)  
<http://www.erm.com>

CLP Power Hong Kong Ltd

Renewable Energy Supply on  
Town Island (Construction  
Phase): *1st Monthly  
Environmental Site Audit Report*

April 2011

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 :	26 April 2011

## *CONTENTS*

<i>1</i>	<i>ENVIRONMENTAL SITE AUDIT</i>	<i>1</i>
<i>1.1</i>	<i>BACKGROUND</i>	<i>1</i>
<i>1.2</i>	<i>SITE AUDIT FINDINGS AND OBSERVATIONS</i>	<i>1</i>

*Annex A Environmental Site Audit Checklist*

*Annex B Photo Records*

# 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 Environmental Permit (EP-397/2010) and environmental auditing 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 first *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 15 April 2011.

## 1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The first monthly environmental site audit was conducted on 15 April 2011. The construction works have been commenced. All mitigation measures have been implemented in full except for a few areas as described below.

It was observed that temporary stockpiling (soil) was located next to the stream. The Contractor was therefore reminded to remove the stockpile as far as possible away from the stream before 22 April 2011 (see Photo 1 in *Annex B*).

It was observed that temporary stockpile of soil has been re-located (see Photo 2 in *Annex B*). The Contractor has been advised to check and confirm the site boundary of the Project. If the temporary stockpile is located outside the site boundary, the temporary stockpile should be moved within the site boundary immediately.

Rubbish bin was not provided within the site boundary during the site audit. The Contractor was advised to provide sufficient rubbish bins within the site boundary and was reminded to segregate the wastes.

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

The photos of the site audit are attached in *Annex B*.

Annex A

# Environmental Site Audit Checklist



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



Inspection Date: 15-04-2011 Time: 10:00 to 11:30

Inspected By: IEC Representative : Angus Choi, Andrew Fung  
 CLP Representative : Raymon Ho  
 Contractor : Kinton Suen

**Weather**

Condition  Sunny  Fine  Overcast  Drizzle  Rain  Storm  Hazy  
 Temperature 26 °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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**B Air Quality**

	Yes	Yes, but need improvement	No	N/A or not observed	Photo/Remarks
B1 Is open burning avoided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B2 Are exposed soil surfaces regularly watered to avoid generation of dust?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B3 Are plant and equipment well maintained? (ie without black smoke from powered plant)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B4 Are stockpiles of dusty material covered or regularly watered?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B5 Is watering implemented during excavation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
B6 Is generation of dust avoided during loading/unloading/excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C2 Are all plant and equipment well maintained and in good operating condition?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C3 Is idle equipment turned off or throttled down?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C4 Are powered mechanical equipment covered or shielded by acoustic materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C5 Are silenced equipment used where practicable?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C6 Is the number of construction plant being used minimized?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C7 Do air compressors have valid noise labels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
C8 Do compressors operate with doors closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

**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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D2 Is drainage system adequate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D3 Is drainage system well maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
D4 Is debris and rubbish in the drainage system collected and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

	disposed of properly?				<input checked="" type="checkbox"/>	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 1
D10	Are treaching carried out for the section of cable in the vicinity of and crossing the stream between Sites 1 and 2?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D11	Is cable trenching works scheduled to be carried out during dry season?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Note 3
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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Excavated Material</b>						
E16	Appears uncontaminated? (colour, odour)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 2

shrubby grassland and young woodland habitats avoided?  
(particularly those caused by filling and illegal dumping)

- |    |   |                                     |                          |                          |                                     |       |
|----|---|-------------------------------------|--------------------------|--------------------------|-------------------------------------|-------|
| 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 type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | _____ |

**Items for Inspection**

- Site 1
- Site 2
- Worksite for underground pipe

**Notes / Issues Recorded On Site**

- 1 Temporary stockpile was observed to be located near the stream.
- 2 It was observed that the temporary stockpile of soil may be located outside the site boundary.
- 3 Rubbish bin was not provided within the site boundary.

**Corrective Actions**

- 1 The Contractor was recommended to remove the stockpile as far as possible away from the stream before 22 April 2011.
- 2 The Contractor was recommended to check and confirm the site boundary of the Project.  
If the temporary stockpile is located outside the site boundary, the temporary stockpile should be moved within the site boundary.
- 3 The Contractor was recommended to provide sufficient rubbish bins within the site boundary and was reminded to segregate the wastes.

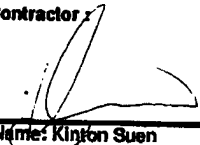
**Signatures:**  
IEC Representative :

  
\_\_\_\_\_  
(Name: Andrew Fung)

CLP Representative :

  
\_\_\_\_\_  
(Name: Raymond Ho)

Contractor :

  
\_\_\_\_\_  
(Name: Kington Suen)



Annex B

## Photo Records

Photo Records on 15 April 2011



Photo 1 - Temporary stockpile was observed located next to the stream.



Photo 2 - Temporary stockpile that was observed maybe located outside the site boundary.