

CLP Power Hong Kong Ltd

Renewable Energy Supply on
Town Island (Construction
Phase): *2nd Monthly
Environmental Site Audit Report*

May 2011

Environmental Resources Management

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Environmental Site Audit Report

May 2011

Reference 0129569

For and on behalf of ERM-Hong Kong, Limited

Approved by: Frank Wan

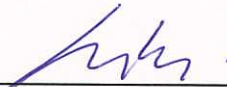
Signed:



Position: Partner

Certified by : Roger Leung

Signed :



Position : Independent Environmental Checker

Date : 19 May 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 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 second *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 11 May 2011.

1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The second monthly environmental site audit was conducted on 11 May 2011. The construction works have commenced. All mitigation measures have been implemented in full except for a few areas as described below.

It was observed that stockpiles (soil) were still found lying adjacent to the stream and at Site 1. Although the stockpiles were packed in bags, there is still a potential risk of having adverse impacts to the environment during rainy days. The Contractor has been reminded to remove the stockpiles within two weeks. (See Photo 1 and Photo 2 in *Annex B*).

Stagnant water was also observed on the tarpaulin sheets covering the stockpiles abutting the stream and at Site 1 (See Photo 3 in *Annex B*). The Contractor has been reminded to remove the stagnant water immediately and frequently inspect and clear stagnant water during regular weekly inspection.

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: 11-05-2011 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 27.2 °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? (Is 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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 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
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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 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
- Worksite for underground pipe

Notes / Issues Recorded On Site

- 1 Stockpiles (soil) were still found next to the stream and at Site 1. Although the stockpiles were packed in bags, there is still a potential risk of having adverse impacts to the environment during rainy day.
- 2 Stagnant water was observed on the tarpulin sheets covering the stockpiles located next to the stream and at Site 1.

Corrective Actions

- 1 The Contractor was reminded to remove the stockpiles within two weeks.
- 2 The Contractor was reminded to remove the stagnant water immediately and frequently inspect and clear stagnant water during regular weekly site inspection.

Signatures:
IEC Representative :



(Name: Andrew Fung)

CLP Representative :



(Name: Raymond Ho)

Contractor :



(Name: K.Q. Cheung)

Annex B

Photo Records

Photo Records on 11 May 2011



Photo 1 - Stockpile was observed at Site 1.



Photo 2 - Stockpile was observed adjacent to the stream.



Photo 3 – Stagnant water was observed on the tarpaulin sheet covering the stockpile located next to the stream.