

CLP Power Hong Kong Ltd

Renewable Energy Supply on
Town Island (Construction
Phase): *11th Monthly
Environmental Site Audit Report*

February 2012

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
<http://www.erm.com>

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Phase): 11th Monthly
Environmental Site Audit Report
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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 :	22 February 2012

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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 eleventh *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 15 February 2012.

1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The eleventh monthly environmental site audit was conducted on 15 February 2012. The construction works conducted during the site audit included site formation works at Site 1 and Site 2. All the temporary worksites have been reinstated. Three observations have been recorded during the site audit and are described below:

- Warning sign was observed tied on tree trunk near haul road at Site 1 (*Photo 1*). The Contractor was reminded to remove the warning sign and suggested to display the warning sign independent from the trees.
- A stone was observed on the branches of tree near Site 1 (*Photo 2*). The Contractor was reminded to remove the stone.
- Plastic bag was observed wrapping on the trunks of trees near the haul road between Site 1 and Site 2 (*Photo 3*). The Contractor was reminded to remove the plastic bag and provide a tree protection zones in order to protect the trees.

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:

- Water tank has been provided at exit of Site 1 for washing the wheels of trucks leaving the construction site (*Photo 4*).
- General refuse and construction material outside the site boundary has been removed and the grass stockpile stored outside the site boundary has been relocated and stored within the site boundary.

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



Inspection Date: Time: to

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

Weather

Condition Sunny Fine Overcast Drizzle Rain Storm Hazy
 Temperature °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? _____

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? _____
 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? Note 1

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? No waste water
 D3 Is drainage system well maintained? generated
 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"/>	} No waste water generated
	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 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	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E5	Stored properly in designated area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E6	Labelled properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E10	Is storage area bunded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E11	Adequate bund capacity? (>110% of the largest tank)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E12	Are storage areas provided with locks and located on sealed areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Excavated Material						
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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 1 - 3

- | | | | | | | |
|----|---|-------------------------------------|--------------------------|--------------------------|--------------------------|-------|
| 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 2

Notes / Issues Recorded On Site

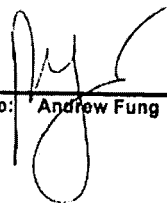
- 1) Warning sign was observed tied on tree trunk near haul road at Site 1.
- 2) Rock was observed on the branches of tree near Site 1.
- 3) Plastic bag was observed wrapping on the trunks of trees near the haul road between Site 1 and Site 2.

Corrective Actions

- 1) The Contractor was reminded to remove the warning sign and suggested to display the warning sign independent from the trees.
- 2) The Contractor was reminded to remove the stone.
- 3) The Contractor was reminded to remove the plastic bag and provide a tree protection zones in order to protect the trees.

Signatures:

IEC Representative :


 (Name: Andrew Fung)

CLP Representative :


 (Name: Raymond Ho)

Contractor :


 (Name: Rebel Hui)

Annex B

Photo Records

Photo Records on 15 February 2012



Photo 1 – Warning sign was observed tied on tree trunk near haul road at Site 1.



Photo 2 – Rock was observed on the branches of tree near Site.



Photo 3 – Plastic bag was observed wrapping on the trunks of trees near the haul road between Site 1 and Site 2.



Photo 4 – Water tank has been provided at exit of Site 1 for washing the wheels of trucks leaving the construction site.