

CLP Power Hong Kong Ltd

Renewable Energy Supply on
Town Island (Construction
Phase): *19th Monthly*
Environmental Site Audit Report

October 2012

Environmental Resources Management

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Phase): 19th Monthly
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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 October 2012

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1 ENVIRONMENTAL SITE AUDIT

1.1 BACKGROUND

The construction works of *Renewable Energy Supply on Town Island* (the Project) 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 nineteenth *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 11 October 2012.

1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The nineteenth monthly environmental site audit was conducted on 11 October 2012. The construction works undertaken during the site audit included superstructure works and the installation of photovoltaic panels at both Site 1 and Site 2. Two observations were made during the site audit and are described below:

- Construction waste was dumped outside the boundary of Site 1 (*Photo 1*). The Contractor removed the construction waste immediately once notified; and
- Oil stain was found on the ground after the relocation of the generator at Site 1 (*Photo 2*). The Contractor removed the oil stain and disposed of it as chemical waste immediately once notified.

The remedial action for the environmental deficiency which was recorded during the previous reporting period has been taken and rectified before the site inspection:

- Drip trays had been provided for the chemical drums at Site 1 (*Photo 3*).

The environmental site audit checklist is given 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: Time: to

Inspected By: IEC Representative : Fung Siu Chung Andrew
 CLP Representative : T.Y. Lee
 Contractor : London (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

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

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? _____
 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 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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 1
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 2
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 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 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 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 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 works? | <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 construction site.
- Site 2 construction site.

Notes / Issues Recorded On Site

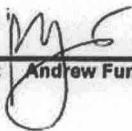
- 1) Construction waste was observed dumping outside the site boundary at Site 1.
- 2) Oil stain was found on ground after the relocation of the generator at Site 1.

Corrective Actions

- 1) The Contractor has removed the construction waste immediately.
- 2) The Contractor has removed the oil stain and dispose of as chemical waste immediately.

Signatures:

IEC Representative :


 (Name: Andrew Fung)

CLP Representative :


 (Name: Raymond Ho)

Contractor :


 (Name: Mic Kwok)

Annex B

Photo Records

Photo Record on 11 October 2012



Photo 1 – Construction waste was dumped outside the boundary of Site 1



Photo 2 – Oil stain was observed on the ground after removing the generator



Photo 3 – Drip trays had been provided for the chemical drums at Site 1