

CLP Power Hong Kong Ltd

Renewable Energy Supply on
Town Island (Construction
Phase): *12th Monthly
Environmental Site Audit Report*

March 2012

Environmental Resources Management

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Town Island (Construction
Phase): 12th *Monthly*
Environmental Site Audit Report
March 2012

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 March 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 twelfth *Monthly Environmental Site Audit Report* presenting the key findings and observations of the site audit conducted on 14 March 2012.

1.2 SITE AUDIT FINDINGS AND OBSERVATIONS

The twelfth monthly environmental site audit was conducted on 14 March 2012. The construction works conducted during the site audit included foundation formation works at Site 1 and Site 2. All the temporary worksites have been reinstated. Four observations have been recorded during the site audit and are described below:

- Painting stain was observed on ground at Site 1 (*Photo 1*). The Contractor was reminded to remove the contaminated soil and dispose off as chemical waste.
- Stagnant water was observed in drip trays at Site 1 and empty drums at Site 2 (*Photo 2 and 3*). The Contractor was reminded to remove the stagnant water and properly cover the drip trays and empty drums to prevent accumulation of stagnant water.
- Bucket with chemical was observed storing in drip tray and without cover. Spillage was also observed next to the bucket (*Photo 4*). The Contractor was reminded to provide cover and drip tray for the bucket containing chemical and remove the contaminated soil and dispose off as chemical waste.
- Road sign was observed tied on tree trunk near haul road at Site 1 (*Photo 5*). The Contractor was reminded to remove the warning sign and suggested to display the warning sign independent from the trees.

The remedial actions for the three environmental deficiencies which were recorded during the previous reporting period has been taken and verified during the site inspection:

- Warning sign tied on the tree trunk near haul road at Site 1 has been removed.
- Rock on the branches of a tree near Site 1 has been removed.
- Plastic bag wrapped on the trunks of trees near the haul road between Site 1 and Site 2 has been removed.

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: 14-03-2012 Time: 10:00 to 12:00

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 15 °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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B2 Are exposed soil surfaces regularly watered to avoid generation of dust?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
B3 Are plant and equipment well maintained? (ie without black smoke from powered plant)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
C3 Is idle equipment turned off or throttled down?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>	} No waste water generated
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 disposed of properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<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"/>		} No waste water generated
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 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 1 and 3
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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Note 4

- | | | | | | | |
|----|---|-------------------------------------|--------------------------|--------------------------|--------------------------|-------|
| 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) Painting stain was observed on ground at Site 1.
- 2) Stagnant water was observed in drip traps at Site 1 and empty drums at Site 2.
- 3) Bucket with chemical was observed storing without cover and drip tray. Spillage was observed next to the bucket.
- 4) Road sign was observed tied on tree trunk near haul road at Site 1.

Corrective Actions

- 1) The Contractor was reminded to remove the contaminated soil and dispose off as chemical waste.
- 2) The Contractor was reminded to remove the stagnant water and properly cover the drip trays and empty drums to prevent accumulation of stagnant water.
- 3) The Contractor was reminded to provide cover and drip tray for the bucket containing chemical and remove the contaminated soil and dispose off as chemical waste.
- 4) The Contractor was reminded to remove the road sign.

Signatures:

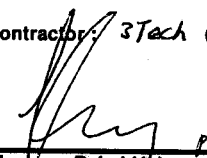
IEC Representative :


 (Name: Andrew Fung)

CLP Representative :


 (Name: Raymond Ho)

Contractor: 3Tech Corporate Ltd.


 (Name: Robert Hui)
 Henry Lee

Annex B

Photo Records

Photo Records on 14 March 2012



Photo 1 – Painting stain was observed on ground at Site 1.



Photo 2 – Stagnant water was observed in drip traps at Site 1.



Photo 3 – Stagnant water was observed in empty drums at Site 2



Photo 4 – Bucket with chemical was observed storing without cover and drip tray. Spillage was observed next to the bucket.



Photo 5 – Road sign was observed tied on tree trunk near haul road at Site 1.