

NEO Kim Teck
Chairman

26 October 2007

Environmental Impact Assessment Ordinance Register Office
27/F, Southorn Centre
130 Hennessy Road
Wanchai
Hong Kong

Attention: Mr. Lawrence Ngo

Our Ref. : CPBEC/OTHS/ECPT/EPD/L/0940
Your Ref. :

Dear Sir,

**Emission Control Project at the Castle Peak 'B' Power Station "B" Units
Environmental Permit (No. EP-251/2006)
Groundwater Monitoring Report No.1 – 1st Measurement**

Pursuant to Condition 3.1 of the captioned Environmental Permit, we are pleased to deposit four hard copies and one soft copy of the Groundwater Monitoring Report with the Director of the Environmental Protection Department.

Groundwater samples were taken according to the Groundwater Monitoring Plan for the first measurement prior to the commencement of major piling and foundation works. According to the analysis results, the TPHs levels in all samples are well below the Risk-based Remediation Goals (RBRGs) for groundwater as stipulated in the "EPD Guidance Note for Contaminated Land Assessment and Remediation".

Please direct any inquiries to our Mr. David Yip, Environmental Team Leader or Mr. Marcus Yip, the Independent Environmental Checker.

Yours faithfully,
For and on behalf of Castle Peak Power Company Limited



Paul Ellingsen
Project Director
CPPS Emission Control Project

Encl.

bcc Tom Brown, David Yip, Creo Yeung - SWAI

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1. Summary of Monitoring Results

Groundwater samples were taken from three monitoring locations within the Project Site on 5 October 2007 for the first measurement of total petroleum hydrocarbons (TPHs) prior to the commencement of the major piling and foundation works for the Project. The monitoring locations are shown in Appendix 2.2.

The results are summarized as follows:

Total Petroleum Hydrocarbons (TPHs) $\mu\text{g/L}$	Sampling Location				**RBRGs for Groundwater (Industrial) $\mu\text{g/L}$
	MW1	MW1a*	MW2	MW3	
C6-C8	<20	<20	<20	<20	1.15E+06
C9-C16	<100	<100	<100	<100	9.98E+06
C17-C35	<150	<150	<150	<150	1.78E+05

* Duplicate sample of MW1 for quality control purpose.

** Risk-based Remediation Goals (RBRGs) quoted from the "EPD Guidance Note for Contaminated Land Assessment and Remediation".

The TPH concentrations in all samples are well below the RBRGs for groundwater for industrial area.

Appendix 2.1 Certificate of Analysis

ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES
ALS TECHNICHEM (HK) Pty Ltd
Environmental Division



CERTIFICATE OF ANALYSIS

CONTACT:	MR C M TONG	Batch:	HK0714386
CLIENT:	CLP POWER HONG KONG LTD	LABORATORY:	HONG KONG
ADDRESS:	ENVIRONMENT TEAM 1/F, EAST WING, GBG MANAGEMENT BUILDING, BLACK POINT POWER STATION, YUNG LONG	DATE RECEIVED:	05/10/2007
PROJECT:	CPPS LAND CONTAMINATION SURVEY	DATE OF ISSUE:	22/10/2007
SITE:	CPPS	SAMPLE TYPE:	WATER
		No. of SAMPLES:	4

COMMENTS

Four water samples were collected by ALS Technichem (HK) staff on 05 October, 2007.
Water sample(s) analysed on an as received basis. Result(s) reported on an as receive basis.
NAPL of groundwater samples are not observable in the aqueous layer during site investigation and monitoring.

NOTES

This is the Final Report and supersedes any preliminary report with this batch number.
Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

ISSUING LABORATORY: HONG KONG

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Mr Tse Siu Chuen, Edmund
Manager - Organics

Other ALS Environmental Laboratories

AUSTRALIA		AMERICAS
Brisbane	Hong Kong	Vancouver
Melbourne	Singapore	Santiago
Sydney	Kuala Lumpur	Amtofagasta
Newcastle	Bogor	Lima

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Abbreviations: % SPK REC denotes percentage spike recovery
CHK denotes duplicate check sample
LOR denotes limit of reporting
LCS % REC denotes Laboratory Control Sample percentage recovery

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A Campbell Brothers Limited Company



CERTIFICATE OF ANALYSIS

Batch: HK0714386
 Date of Issue: 22/10/2007
 Client: CLP POWER HONG KONG LTD
 Client Reference: CPPS

METHOD	ANALYSIS DESCRIPTION	UNIT	SAMPLE IDENTIFICATION				
			Laboratory I.D.	1	2	3	4
			Date Sampled	05/10/2007	05/10/2007	05/10/2007	05/10/2007
		LOR	MW1	MW2	MW3	MW1a	
EP071	TOTAL PETROLEUM HYDROCARBONS						
101	C6-C8	ug/L	<20	<20	<20	<20	
102	C9-C16	ug/L	<100	<100	<100	<100	
103	C17-C35	ug/L	<150	<150	<150	<150	
EP080S	VOLATILE TPH/BTEX SURROGATE RECOVERY						
101	Dibromofluoromethane	%	93	97	99	93	
102	Toluene-d8	%	100	100	100	100	
103	4-BFB	%	100	101	103	100	



QUALITY CONTROL REPORT

Batch: HK0714386
 Date of Issue: 22/10/2007
 Client: CLP POWER HONG KONG LTD
 Client Reference: CPPS

METHOD	ANALYSIS DESCRIPTION	UNIT	LOR	SAMPLE IDENTIFICATION			
				Laboratory I.D.	Date Sampled		
EP071	TOTAL PETROLEUM HYDROCARBONS			200			
101	C6-C8	ug/L	20				
102	C9-C16	ug/L	100				
103	C17-C35	ug/L	150				
EP080S	VOLATILE TPH/BTEX SURROGATE RECOVERY			BLANK			
101	Dibromofluoromethane	%	86				
102	Toluene-d8	%	88				
103	4-BFB	%	86				



ORGANICS QUALITY CONTROL REPORT

BATCH NO.: HK0714386

DATE BATCH RECEIVED : 05/10/2007

CLIENT : CLP POWER HONG KONG LTD DATE BATCH COMPLETED : 18/10/2007

Method Code	Test	Matrix	QC Lot Number	Date Samples Extracted	Date Samples Analysed
EP-071	TPH-Volatile	Water	080W684	17/10/2007	18/10/2007
	TPH-Semivolatile	Water	071W672	11/10/2007	12/10/2007

Mr Tse Siu Chuen, Edmund
Supervisor - Organics

BATCH QUALITY CONTROL

ALS EP-071 : TPH ANALYSIS

QC Lot No. : 080W 684
 MATRIX: Water

ANALYST: On

COMPOUND	Blank Results ug/L	Spike Conc. ug/L	QC SPIKE RESULTS		Control Limits	
			SCS Conc. ug/L	Rec. %	% Recovery	
					Low	High
C6	<LOR	50	58.63	117	66	130
C7	<LOR	50	52.16	104	68	130
C8	<LOR	50	50.97	102	69	130
C9	<LOR	50	53.61	107	70	130
C10	<LOR	50	55.94	112	68	130

COMMENTS :

1) A set of QC samples which comprise Blank and SCS is done for every 20 samples.

2) QC Acceptance Criteria :

To accept a QC, 80% of target analytes must pass all of the following criteria :

a) Accuracy : Recovery of SCS must fall within the recovery control limits.

b) Blank concentration must be less than LOR.

Control limits are established from the previous 20 QC sets of recovery data.

3) Abbreviations & Explanatory Notes:

QC : Quality Control

Rec. : Recovery

SCS : Single Control Sample - an interference free sample spiked with target analytes.

ND : Not Detected

LOR : Limit of Reporting - lowest concentration of target analytes for reporting.

Conc. : Concentration

* : Recovery falls outside the recommended control limits.

BATCH QUALITY CONTROL

ALS EP-071 : Total Petroleum Hydrocarbons by Fractions

MATRIX: Water

ANALYST: TK.HO

QC LOT No.: 071W672

Semivolatile Components

COMPOUND	Limit Of	Blank	Spike	Spike Results		Control Limits	
	Reporting			Conc.	Conc.	SCS Conc.	Rec.
	ug/L	ug/L	ug/L	ug/L	%	Low	High
C11-C16	100	<LOR	150	105	70	50	130
C17-C35	150	<LOR	550	460	84	50	130

COMMENTS :

1) A set of QC samples which comprise Blank and SCS is done for every 20 samples.

2) QC Acceptance Criteria :

To accept a QC, 80% of target analytes must pass all of the following criteria :

a) Accuracy : Recovery of SCS must fall within the recovery control limits.

b) Blank concentration must be less than LOR.

Control limits are established from the previous 20 QC sets of recovery data.

3) Abbreviations & Explanatory Notes:

QC : Quality Control

Rec. : Recovery

SCS : Single Control Sample - an interference free sample spiked with target analytes.

ND : Not Detected

LOR : Limit of Reporting - lowest concentration of target analytes for reporting.

Conc. : Concentration

* : Recovery falls outside the recommended control limits.

BATCH QUALITY CONTROL**ALS EP-080 : BTEX ANALYSIS**QC Lot No. : 080W684
MATRIX: Water

ANALYST: On

COMPOUND	Blank Results ug/L	Spike Conc. ug/L	QC SPIKE RESULTS		Control Limits	
			SCS Conc. ug/L	Rec. %	% Recovery	
					Low	High
Benzene	<LOR	10	9.01	90	67	124
Toluene	<LOR	10	11.11	111	71	117
Chlorobenzene	<LOR	10	10.85	109	71	127
Ethylbenzene	<LOR	10	11.56	116	71	130
m- & p-Xylene	<LOR	20	22.48	112	72	130
o-Xylene	<LOR	10	10.22	102	69	130

COMMENTS :

1) A set of QC samples which comprise Blank and SCS is done for every 20 samples.

2) QC Acceptance Criteria :

To accept a QC, 80% of target analytes must pass all of the following criteria :

- a) Accuracy : Recovery of SCS must fall within the recovery control limits.
- b) Blank concentration must be less than LOR.

Control limits are established from the previous 20 QC sets of recovery data.

3) Abbreviations & Explanatory Notes:

QC : Quality Control

Rec. : Recovery

SCS : Single Control Sample - an interference free sample spiked with target analytes.

ND : Not Detected

LOR : Limit of Reporting - lowest concentration of target analytes for reporting.

Conc. : Concentration

* : Recovery falls outside the recommended control limits.

Appendix 2.2 Groundwater Monitoring Well Locations

