

Appendix F

The QA/QC Procedures and Results

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: R.T. Site No.: AMI
 Date of visit: 3-11-04 Hour of Visit: 10:00
 Staff name: H.K. TSANG HVAS S/N: 2198
 Used filter paper no.: LRS5 New filter paper no.: LRS7
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{23.2 + 273}{296.2} \text{K}$ Pressure, $P_a = \underline{1016} \text{ mb}$

II. Correction of manometer reading

Calibration orifice No.	Manometer reading at site conditions corresponds to $Q_{STD} = 40 \text{ ft}^3/\text{min}$. (inch H_2O)
1534(09/2004)	$\Delta H_a = 18.33(T_a/P_a) = \underline{5.34}$

Manometer reading before calibration: 5.6
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.3

Note: Tolerance Limit of HVAS flow: $\pm 1.0 \text{ ft}^3/\text{min}$. Corresponding limits for manometer : $\pm 0.2 \text{ inch H}_2\text{O}$

III. General Conditions of HVAS

IV. Remarks

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: E.G. Site No.: AM 2
 Date of visit: 15-11-04 Hour of Visit: 10:20
 Staff name: H.K. TSANG HVAS S/N: 2185
 Used filter paper no.: LR 60 New filter paper no.: LR 62
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{26 + 273}{273}$ K Pressure, $P_a = 1019$ mb

II. Correction of manometer reading

Calibration orifice No.	Manometer reading at site conditions corresponds to $Q_{STD} = 40 \text{ ft}^3/\text{min}$. (inch H ₂ O)
1534(09/2004)	$\Delta H_a = 18.33(T_a/P_a) = 5.38$

Manometer reading before calibration: 5.7
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.4

Note: Tolerance Limit of HVAS flow: $\pm 1.0 \text{ ft}^3/\text{min}$. Corresponding limits for manometer : $\pm 0.2 \text{ inch H}_2\text{O}$

III. General Conditions of HVAS

IV. Remarks

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: Ash Lagoon Site Number: A13
Date of Visit: 15-11-04 Hour of Visit: 14:00
Staff Name: H.K. TSANG Partisol S/N: 200013 205500001
Used Filter No.: PC 26 New Filter No.: PC 27
Ambient temperature: 25.8°C Ambient pressure: 1017

I. General Services

1. Replace control unit Large In-line Filter X
2. Clean the sample inlet head ✓
3. Clean sample tube ✓
4. Clean / Replace pump head X
5. Clean / Replace piston ✓

II. Operational Audits (3 months interval as recommended by manufacturer)

1. Temperature Check (Ambient temperature $\pm 2^\circ\text{C}$)

_____ °C Calibration: Y/N _____ °C
Before After

2. Pressure Check (Ambient pressure ± 20 mbar)(factor = 0.000987)

_____ mbar Calibration: Y/N _____ mbar
Before After

3. Flow Check (16.7 \pm 1.1 litre/min)

_____ l/min Calibration: Y/N _____ l/min
Before After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYV Site No.: AM4
Date of visit: 15-11-04 Hour of Visit: 11:15
Staff name: H.K. TSANG MINIVOL S/N: 903
Used filter paper no.: MH11 New filter paper no.: MH12

Type of filter: Cellulose / Glass-fibre
(Delete as appropriate)

I. Calibration is performed by using Drycal DC-2 Flow Calibrator

5 Sl/min set point is recommended

5.00 Before 5.00 After

II. General Service of Mini Vol Air Sampler

1. Clean Rotameter: ✓
2. Clean / ~~replace~~ Pump Valves: ✓
3. Clean / ~~replace~~ Pump Diaphragms: ✓
4. Clean Impaction Inlet: X
5. Replace Timer Battery Every 6 months: X
6. Replace Inlet Filter: ✓

III. Remarks

THE HONGKONG ELECTRIC CO., LTD.
LAMMA POWER STATION EXTENSION
TEOM 1400A CONTINUOUS DUST MONITOR
DATA QUALITY ASSURANCE LOG SHEET

Month : November

Year : 2004

Reservoir (AM1)					
Date	Frequency (Hz) (230 – 260)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (l/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)
2/11/2004	254.17	0.031	4	1.00	15.68
9/11/2004	254.56	0.029	4	1.00	15.68
14/11/2004	254.41	0.038	4	1.00	15.68
20/11/2004	253.89	0.034	4	1.00	15.68
26/11/2004	253.48	0.025	4	1.00	15.68

East Gate (AM2)					
Date	Frequency (Hz) (230 – 250)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (l/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)
2/11/2004	246.15	0.063	4	1.00	15.64
8/11/2004	245.73	0.043	4	1.00	15.63
14/11/2004	247.59	0.043	4	1.00	15.63
20/11/2004	245.17	0.050	4	0.99	15.66
26/11/2004	246.46	0.051	4	0.99	15.65

Ash Lagoon (AM3)					
Date	Frequency (Hz) (230 – 260)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (l/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)
2/11/2004	251.86	0.031	4	1.00	15.63
8/11/2004	254.86	0.034	4	0.99	15.62
14/11/2004	254.71	0.048	4	0.99	15.63
20/11/2004	254.29	0.037	4	1.00	15.64
26/11/2004	253.87	0.036	4	0.99	15.64

Maintenance Record			
	Reservoir	East Gate	Ash Lagoon
TEOM Filter Exchange	✓	✓	✓
Clean TSP Inlet	✓	✓	✓
Replace flow in-line filter			
Pump Repair			
Leak Check			
Flow Audit			✓
Flow Controller Calibration			
A/C filter cleaning	✓	✓	✓

Remarks:

The TEOM 1-hr TSP sampler at AM1 (Reservoir) was found defective on 8/11/04. A make-up 1 hr TSP sampling for AM1 was carried out on 9/11/04.

Prepared by : Alex

Checked by : Ch

THE HONGKONG ELECTRIC CO., LTD.
LAMMA POWER STATION EXTENSION
NOISE MONITORING STATION
SITE VISIT LOG SHEET

Location Ash Lagoon/Ching Lam*

Date 15-11-04 Time 14:30

Equipment Rion NA-27/B&K-2238F* Sound Level Meter

Serial Number 00111465/00111466/00111467/2343838/2356907*

Staff Attended H. K. TSANG

1. Calibration

Acoustic calibrator used Rion NC-74

Calibration level before adjustment (dB(A)) 94.0

Calibration level after adjustment (dB(A)) 94

2. Weather Conditions

a. ~~Sunny/fine/cloudy/showery/heavy rain*~~

b. ~~Strong wind/breeze/calm*~~

3. Remark/Observation

Note: * - Please delete where inappropriate

THE HONGKONG ELECTRIC CO., LTD.
LAMMA POWER STATION EXTENSION
NOISE MONITORING STATION
SITE VISIT LOG SHEET

Location ~~Ash Lagoon~~/Ching Lam*

Date 16-11-04 Time 10:45

Equipment ~~Rion NA-27~~/B&K 2238F* Sound Level Meter

Serial Number 00111465/00111466/00111467/2343838/2356907*

Staff Attended W.L.MAK ; H.K.TSANG

1. Calibration

Acoustic calibrator used Rion NC-74

Calibration level before adjustment (dB(A)) 94.0

Calibration level after adjustment (dB(A)) 94

2. Weather Conditions

a. ~~Sunny/fine/cloudy/showery/heavy rain*~~

b. ~~Strong wind/breeze/calm*~~

3. Remark/Observation

Note: * - Please delete where inappropriate

18/5/2004

Equipment Calibration Record for November 2004

Site: Civil works for 275kV Cable Route from Lamma Island to Cyberport

Noise Equipment Used: RION NL-31

Calibrator Used: RION NC-74

Measurement Location: N4 – Pak Kok Tsui No. 2

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
02/11/2004	94.0	94.0	Anthony Wong
05/11/2004	94.0	94.0	Anthony Wong
09/11/2004	94.0	94.0	Anthony Wong
12/11/2004	94.0	94.0	Anthony Wong
16/11/2004	94.0	94.0	Anthony Wong
19/11/2004	94.0	94.0	Anthony Wong
23/11/2004	94.0	94.0	Anthony Wong
26/11/2004	94.0	94.0	Anthony Wong
30/11/2004	94.0	94.0	Anthony Wong

Measurement Location: N5 – Pak Kok Tsui No. 8

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
02/11/2004	94.0	94.0	Anthony Wong
05/11/2004	94.0	94.0	Anthony Wong
09/11/2004	94.0	94.0	Anthony Wong
12/11/2004	94.0	94.0	Anthony Wong
16/11/2004	94.0	94.0	Anthony Wong
19/11/2004	94.0	94.0	Anthony Wong
23/11/2004	94.0	94.0	Anthony Wong
26/11/2004	94.0	94.0	Anthony Wong
30/11/2004	94.0	94.0	Anthony Wong

Note: Measurement accepted as valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.