

Appendix F

The QA/QC Procedures and Results

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: R.E Site No.: Am1
 Date of visit: 13-5-2004 Hour of Visit: 1035
 Staff name: W.L. MAK HVAS S/N: 2198
 Used filter paper no.: LQ94 New filter paper no.: LQ96
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{273 + 34.0}{307}$ K Pressure, $P_a = 1007$ 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(04/2002)	$\Delta H_a = 18.0(T_a/P_a) = \underline{\hspace{2cm}}$
✓ 1535(09/2003)	$\Delta H_a = 18.2(T_a/P_a) = \underline{5.55}$

Manometer reading before calibration: 5.60

Adjustment of flow controller (Y/N): N

Manometer reading after calibration: 5.60

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: 13-5-04 Hour of Visit: 10:00
 Staff name: W.L. MAK; H.K. TSI HVAS S/N: 2195
 Used filter paper no.: LQ95 New filter paper no.: 2097
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{31.273}{30.4}$ K Pressure, $P_a = 1010$ 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(04/2002)	$\Delta H_a = 18.0(T_a/P_a) = \underline{\hspace{2cm}}$
✓ 1535(09/2003)	$\Delta H_a = 18.2(T_a/P_a) = \underline{5.47}$

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

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: AL Site Number: Am 3
Date of Visit: 13-1-2004 Hour of Visit: 11:10
Staff Name: W L MAK, H K TSANG Partisol S/N: 2000B 205500001
Used Filter No.: PC00 New Filter No.: PC01
Ambient temperature: 32.3°C Ambient pressure: 1012 mbar

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 $\pm 2^\circ\text{C}$)

_____ $^\circ\text{C}$ Calibration: Y/N _____ $^\circ\text{C}$
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: 13-5-04 Hour of Visit: 10:30

Staff name: H.K. ISAAC MINIVOL S/N: 903

Used filter paper no.: M674 New filter paper no.: M675

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: x
3. Clean / ~~replace~~ Pump Diaphragms: ✓
4. Clean Impaction Inlet: ✓
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 : May

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)
6/5/2004	255.45	0.037	4	1.00	15.68
12/5/2004	255.25	0.037	4	1.00	15.67
18/5/2004	255.11	0.041	4	1.00	15.68
24/5/2004	254.83	0.028	4	1.00	15.68
30/5/2004	254.68	0.028	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)
6/5/2004	246.63	0.045	4	0.99	15.65
12/5/2004	246.47	0.033	4	0.99	15.64
18/5/2004	247.61	0.065	4	1.00	15.63
24/5/2004	247.30	0.050	4	1.00	15.65
30/5/2004	247.13	0.033	4	1.00	15.63

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)
6/5/2004	254.22	0.032	4	1.00	15.63
12/5/2004	254.03	0.033	4	1.00	15.64
18/5/2004	253.91	0.031	4	0.99	15.64
24/5/2004	255.43	0.026	4	0.99	15.64
30/5/2004	255.28	0.029	4	1.00	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:

Prepared by :

Checked by :

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

Location Ash Lagoon/~~Ching Lam*~~

Date 13-5-04 Time 1130

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)) 93.8

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

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

Location Ash Lagoon/Ching Lam*

Date 12-5-04 Time 11:15

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

Serial Number ~~001111465/001111466/001111467/2343838/2356907*~~

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

Equipment Calibration Record

Site: Lamma Power Station Extension – Transmission System

Noise Equipment Used: Rion NL-14 sound level meter

Calibrator Used: B&K 4231 sound level calibrator

Measurement Location: N4 – Pak Kok Tsui No. 2

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
17/05/2004	94.0	94.0	T. M. Chan
20/05/2004	94.0	94.0	T. M. Fung
24/05/2004	94.0	94.0	T. M. Chan
27/05/2004	94.0	94.0	T. M. Fung
31/05/2004	94.0	94.0	T. M. Chan

Measurement Location: N5 – Pak Kok Tsui No. 8

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
17/05/2004	94.0	94.0	T. M. Chan
20/05/2004	94.0	94.0	T. M. Fung
24/05/2004	94.0	94.0	T. M. Chan
27/05/2004	94.0	94.0	T. M. Fung
31/05/2004	94.0	94.0	T. M. Chan

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



Approved by: DANIEL SUM

Date: 31/05/2004