

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: 12-7-04 Hour of Visit: 13:45
 Staff name: w.l.nhk - H.k.Tung HVAS S/N: 2198
 Used filter paper no.: LR15 New filter paper no.: LR17
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{273 + 333}{306.3}$ K Pressure, $P_a = 1009$ 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)	$\Delta H_a = 18.0(T_a/P_a) =$ _____
1535(09/2003) /	$\Delta H_a = 18.2(T_a/P_a) = 5.5$

Manometer reading before calibration: 5.7
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.5

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.: AM2
 Date of visit: 12-7-2004 Hour of Visit: 1120
 Staff name: W.L. MAK HVAS S/N: 2195
 Used filter paper no.: LR16 New filter paper no.: LR 18
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{20.3 + 32.7}{2} = 26.5$ K Pressure, $P_a = 1013$ 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)	$\Delta H_a = 18.2(T_a/P_a) = \underline{5.49}$

Manometer reading before calibration: 5.20
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.50

Note: Tolerance Limit of HVAS flow: $\pm 1.0 \text{ ft}^3/\text{min}$. Corresponding limits for manometer : ± 0.2 inch H_2O

III. General Conditions of HVAS

IV. Remarks

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: Ash Laguna Site Number: AM 3
Date of Visit: 12-7-04 Hour of Visit: 14:05
Staff Name: W.L. MAK, H.K. TSANG Partisol S/N: 2000B205500001
Used Filter No.: M6 85 New Filter No.: M6 86
Ambient temperature: 30.3°C Ambient pressure: 1011 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 X

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

1. Temperature Check (Ambient temperature $\pm 2^\circ\text{C}$)
30.3 °C Before Calibration: Y/N 30.3 °C After
2. Pressure Check (Ambient pressure ± 20 mbar)(factor = 0.000987)
1009 mbar Before Calibration: Y(N) 1009 mbar After
3. Flow Check (16.7 \pm 1.1 litre/min)
16.7 l/min Before Calibration: Y(N) 16.7 l/min After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYV Site No.: AM4
Date of visit: 12-7-04 Hour of Visit: 10:35
Staff name: H.K. TSANG MINIVOL S/N: 903
Used filter paper no.: MG 85 New filter paper no.: MG 86

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

4990 Before 4.990 After

II. General Service of Mini Vol Air Sampler

1. Clean Rotameter: x
2. Clean / replace Pump Valves: x
3. Clean / replace Pump Diaphragms: x
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 : July

Year : 2004

Reservoir (AM1)					
Date	Frequency (Hz) (230 – 260)	Noise (< 0.2)	Operation Mode (Mode 4)	Main Flow (l/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)
7/7/2004	262.91	0.166	4	1.00	15.66
12/7/2004	262.83	0.191	4	1.00	15.66
17/7/2004	262.73	0.168	4	1.00	15.66
23/7/2004	262.64	0.114	4	1.00	15.66
29/7/2004	262.48	0.115	4	1.00	15.66

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)
5/7/2004	247.33	0.045	4	1.00	15.63
11/7/2004	247.10	0.034	4	0.99	15.64
17/7/2004	246.99	0.032	4	1.00	15.64
23/7/2004	248.37	0.031	4	0.99	15.65
29/7/2004	248.20	0.039	4	0.99	15.64

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)
5/7/2004	255.41	0.028	4	0.99	15.64
11/7/2004	255.28	0.041	4	0.99	15.65
17/7/2004	255.15	0.020	4	0.99	15.66
23/7/2004	255.05	0.038	4	1.00	15.63
29/7/2004	254.09	0.030	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:

TSP samples at Am1 (Reservoir) was found defective on 5-7-04. A make-up sample was carried out on 7/7/04. TSP sampling at Am1 was suspended on 11/7/04 due to power failure. A make-up sample was conducted on 12/7/04.

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 12-7-04 Time 14:10
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

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

Location Ash Lagoon/Ching Lam*

Date 12 - 7 - 04 Time 10.30

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

Equipment Calibration Record for July 2004

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

Noise Equipment Used: RION NL-14

Calibrator Used: RION NC-73

Measurement Location: N4 – Pak Kok Tsui No. 2

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
03/07/2004	94.0	94.0	Esther Luk
07/07/2004	94.0	94.0	Esther Luk
10/07/2004	94.0	94.0	Esther Luk
14/07/2004	94.0	94.0	Esther Luk
17/07/2004	94.0	94.0	Esther Luk
20/07/2004	94.0	94.0	Esther Luk
23/07/2004	94.0	94.0	Esther Luk
27/07/2004	94.0	94.0	Esther Luk
31/07/2004	94.0	94.0	Esther Luk

Measurement Location: N5 – Pak Kok Tsui No. 8

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
03/07/2004	94.0	94.0	Esther Luk
07/07/2004	94.0	94.0	Esther Luk
10/07/2004	94.0	94.0	Esther Luk
14/07/2004	94.0	94.0	Esther Luk
17/07/2004	94.0	94.0	Esther Luk
20/07/2004	94.0	94.0	Esther Luk
23/07/2004	94.0	94.0	Esther Luk
27/07/2004	94.0	94.0	Esther Luk
31/07/2004	94.0	94.0	Esther Luk

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