

Appendix F

The QA/QC Procedures and Results

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: R.E. Site No.: Am 1
 Date of visit: 13-1-2003 Hour of Visit: 14:00
 Staff name: W. L. MAK, H.K. TANG HVAS S/N: 2198
 Used filter paper no.: LP26 New filter paper no.: LP28
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{21.3 + 27.3}{2} = 24.3$ K Pressure, $P_a = 1012$ 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)	$\Delta H_a = 18.0(T_a/P_a) = 5.2$
1535(04/2002)	$\Delta H_a = 17.9(T_a/P_a) =$ _____

Manometer reading before calibration: 5.2
 Adjustment of flow controller (Y/N): N
 Manometer reading after calibration: 5.2

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

Replace carbon brush.

IV. Remarks

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: EG Site No.: AM2
 Date of visit: 13/1/03 Hour of Visit: 11:05
 Staff name: W. L. MHL HVAS S/N: 2195
 Used filter paper no.: LP27 New filter paper no.: LP29
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = 273 + 21.6$ K Pressure, $P_a = 1018$ mb

II. Correction of manometer reading

Calibration orifice No.	Manometer reading at site conditions corresponds to $Q_{STD} = 40$ ft ³ /min. (inch H ₂ O)
✓ 1534(04/2002)	$\Delta H_a = 18.0(T_a/P_a) = 5.21$
1535(04/2002)	$\Delta H_a = 17.9(T_a/P_a) = \underline{\hspace{2cm}}$

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

Note: Tolerance Limit of HVAS flow: ± 1.0 ft³/min. Corresponding limits for manometer : ± 0.2 inch H₂O

III. General Conditions of HVAS

Replacement of HVAS carbon brush

IV. Remarks

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: Ash Kuyon Site Number: AM3
Date of Visit: 13 - 1 - 2003 Hour of Visit: 10:15
Staff Name: W.L.MAK ; H.K.TSANG Partisol S/N: 2000B 2055001
Used Filter No.: PB12 New Filter No.: PB13
Ambient temperature: 18.2 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 ✓
5. Clean / Replace piston ✓

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

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

18.9 °C Before Calibration: X/N 18.9 °C After

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

1.00 ^{atm} / mbar Before Calibration: Y/N 1007 mbar After

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

16.72 l/min Before Calibration: Y/N 16.72 l/min After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYU Site No.: Am 4
Date of visit: 13-1-2005 Hour of Visit: 11:15
Staff name: H.K. Tsang MINIVOL S/N: 903
Used filter paper no.: MF 78 New filter paper no.: MF 79
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

5066 Before 5008 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 : JAN. Year : 2003

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)
6-1-03	234.83	0.034	4	1.00	15.68
12-1-03	234.34	0.029	4	1.00	15.67
18-1-03	234.00	0.023	4	1.00	15.68
24-1-03	233.36	0.036	4	1.00	15.68
30-1-03	233.15	0.027	4	1.00	15.67

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)
6-1-03	244.21	0.036	4	1.00	15.65
12-1-03	243.69	0.030	4	1.00	15.65
18-1-03	243.35	0.062	4	1.00	15.64
24-1-03	246.30	0.022	4	1.00	15.65
30-1-03	245.80	0.030	4	1.00	15.65

Ash Lagoon (AM3)					
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)
6-1-03	245.66	0.031	4	1.00	15.64
12-1-03	245.37	0.040	4	0.99	15.64
18-1-03	247.12	0.023	4	1.00	15.64
24-1-03	246.57	0.035	4	0.99	15.63
30-1-03	246.34	0.024	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 : Alex

Checked by : [Signature]

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

Location Ash Lagoon/~~Ching Lam~~

Date 13-1-2003 Time 10:00

Equipment Rion NA-27 Sound Level Meter

Serial Number 00111465/00111466/00111467*

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

1. Calibration

Acoustic calibrator used Rion NC-74

Calibration level before adjustment (dB(A)) 93.9

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

