

Appendix F

The QA/QC Procedures and Results

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: RE. Site No.: AM1
 Date of visit: 16-9-04 Hour of Visit: 10:00
 Staff name: U. LMAK, HKISANIG HVAS S/N: 2198
 Used filter paper no.: LR 39 New filter paper no.: LR41
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{28.7 + 273}{301.7}$ K Pressure, $P_a = 1012$ 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)	$\Delta H_a = 18.0(T_a/P_a) = \underline{\hspace{2cm}}$
1535(09/2003) ✓	$\Delta H_a = 18.2(T_a/P_a) = \underline{5.4}$

Manometer reading before calibration: 5.1
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.4

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

III. General Conditions of HVAS

IV. Remarks

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: EG Site No.: AM 2
 Date of visit: 16-9-2004 Hour of Visit: 10:45
 Staff name: W L. MAK HVAS S/N: 2195
 Used filter paper no.: LR40 New filter paper no.: LR42
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{273 + 35.7}{308.7}$ 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)	$\Delta H_a = 18.0(T_a/P_a) = \underline{\hspace{2cm}}$
✓ 1535(09/2003)	$\Delta H_a = 18.2(T_a/P_a) = \underline{5.51}$

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

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

III. General Conditions of HVAS

IV. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: ASH LAGOON Site No.: AM 3
Date of visit: 3 - 9 - 2004 Hour of Visit: 1300
Staff name: W L. MAK MINIVOL S/N: 3393 BATTERY 1721
Used filter paper no.: / New filter paper no.: MG 95
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

 ~~Before~~ 5008 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

New mini-volume in use elapsed timer 27.0 HR

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: ASH LADGON Site Number: Atm 3

Date of Visit: 20-9-04 Hour of Visit: 11:40

Staff Name: W. L. MAL/H. K. ISANIG Partisol S/N: 2000 B 205500001

Used Filter No.: PC 16 New Filter No.: PC 17

Ambient temperature: 30.5 Ambient pressure: 1010

I. General Services

1. Replace control unit Large In-line Filter ✓
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 $\pm 2^{\circ}\text{C}$)

30.5 °C Before Calibration: Y/N 30.5 °C After

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

1.001 (atm) mbar Before Calibration: Y/N 1010 mbar After

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

16.70 l/min Before Calibration: Y/N 16.67 l/min After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYV Site No.: AM4
Date of visit: 16-9-04 Hour of Visit: 11:00
Staff name: H.K. TSANG MINIVOL S/N: 903
Used filter paper no.: M698 New filter paper no.: MH00
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
4970 Before 5,000 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: _____ ✓
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 : September 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)
3/9/2004	262.74	0.029	4	1.00	15.66
9/9/2004	262.33	0.037	4	1.00	15.66
15/9/2004	262.09	0.025	4	1.00	15.67
21/9/2004	262.11	0.039	4	1.00	15.67
27/9/2004	261.91	0.064	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)
3/9/2004	246.68	0.044	4	1.00	15.64
9/9/2004	246.47	0.037	4	1.00	15.65
15/9/2004	246.08	0.033	4	0.99	15.64
21/9/2004	245.84	0.037	4	0.99	15.64
27/9/2004	248.33	0.049	4	1.00	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)
3/9/2004	254.60	0.032	4	0.99	15.64
9/9/2004	254.40	0.038	4	0.98	15.66
15/9/2004	253.99	0.032	4	1.00	15.62
21/9/2004	253.74	0.030	4	0.99	15.64
27/9/2004	253.44	0.035	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 : Che

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

Location ~~Ash Lagoon~~/Ching Lam*

Date 15-9-2004 Time 11:00

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

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

Staff Attended W. L. MAK

1. Calibration

Acoustic calibrator used	<u>Rion NC-74</u>
Calibration level before adjustment (dB(A))	<u>94.2</u>
Calibration level after adjustment (dB(A))	<u>94</u>

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 16-9-04 Time 11:40

Equipment Rion NA-27/B&K-2238P* 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

Equipment Calibration Record for September 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
2004/9/3	94.0	94.0	Anthony Wong
2004/9/7	94.0	94.0	Anthony Wong
2004/9/10	94.0	94.0	Anthony Wong
2004/9/14	94.0	94.0	Anthony Wong
2004/9/17	94.0	94.0	Anthony Wong
2004/9/21	94.0	94.0	Anthony Wong
2004/9/24	94.0	94.0	Anthony Wong
2004/9/28	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
2004/9/3	94.0	94.0	Anthony Wong
2004/9/7	94.0	94.0	Anthony Wong
2004/9/10	94.0	94.0	Anthony Wong
2004/9/14	94.0	94.0	Anthony Wong
2004/9/17	94.0	94.0	Anthony Wong
2004/9/21	94.0	94.0	Anthony Wong
2004/9/24	94.0	94.0	Anthony Wong
2004/9/28	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