

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: 16-12-05 Hour of Visit: 13:50
 Staff name: H.K. TSANG HVAS S/N: 2198
 Used filter paper no.: LS 95 New filter paper no.: LS 97
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{20 + 273}{293}$ K Pressure, $P_a = 1016$ 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)
1535(09/2005)	$\Delta H_a = 19.29(T_a/P_a) = 5.56$

Manometer reading before calibration: 5.9
 Adjustment of flow controller (Y/N): Y
 Manometer reading after calibration: 5.6

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: FG Site No.: AM2
 Date of visit: 16-12-05 Hour of Visit: 14:20
 Staff name: H.K. TSANG HVAS S/N: 2195
 Used filter paper no.: LS96 New filter paper no.: LS98
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{23+27}{2} = 25$ K Pressure, $P_a = 1021$ 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)
1535(09/2005)	$\Delta H_a = 19.29(T_a/P_a) = 5.54$

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: ± 1.0 ft³/min. Corresponding limits for manometer : ± 0.2 inch H₂O

III. General Conditions of HVAS

IV. Remarks

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: A.1 Site Number: AM3
Date of Visit: 16-12-05 Hour of Visit: 10:25
Staff Name: H.K. Tsang Partisol S/N: 2006207550410
Used Filter No.: PC92 New Filter No.: PC93
Ambient temperature: 18°C Ambient pressure: 1024 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 $\pm 2^\circ\text{C}$)

18 °C Before Calibration: Y/N 18 °C After

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

1010 mbar Before Calibration: Y/N 1024 mbar After

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

17.0 l/min Before Calibration: Y/N 17.0 l/min After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYV Site No.: AM4
Date of visit: 16-12-05 Hour of Visit: 11:20
Staff name: H.K. Tsang MINIVOL S/N: 3313
Used filter paper no.: MH7P New filter paper no.: MH80
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
5.0 Before 5.0 After

II. General Service of Mini Vol Air Sampler

1. Clean Rotameter: X
2. Clean / replace Pump Valves: ✓
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 : December

Year : 2005

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)
3/12/2005	237.31	0.042	4	1.00	15.65
9/12/2005	236.80	0.026	4	1.00	15.65
15/12/2005	256.53	0.025	4	1.00	15.65
21/12/2005	255.76	0.036	4	1.00	15.65
27/12/2005	237.72	0.032	4	1.00	15.65

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)
3/12/2005	243.74	0.033	4	0.99	15.63
9/12/2005	243.22	0.061	4	0.99	15.63
15/12/2005	244.75	0.030	4	0.99	15.63
21/12/2005	244.21	0.057	4	1.00	15.63
27/12/2005	244.13	0.026	4	0.99	15.63

Ash Lagoon (AM3)					
Date	Frequency (Hz) (240 – 270)	Noise (< 0.1)	Operation Mode (Mode 4)	Main Flow (l/min) (0.94 – 1.06)	Aux. Flow (l/min) (14.67 – 16.67)
3/12/2005	247.10	0.031	4	1.00	15.66
9/12/2005	246.70	0.033	4	1.00	15.67
15/12/2005	246.31	0.039	4	1.00	15.66
21/12/2005	247.37	0.062	4	1.00	15.69
27/12/2005	246.93	0.060	4	1.00	15.66

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 12-12-05 Time 14:00
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	<u>Rion NC-74</u>
Calibration level before adjustment (dB(A))	<u>93.8</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

Equipment Calibration Record for December 2005

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
02/12/2005	94.0	94.0	Anthony Wong
06/12/2005	94.0	94.0	Anthony Wong
09/12/2005	94.0	94.0	Anthony Wong
13/12/2005	94.0	94.0	Anthony Wong
16/12/2005	94.0	94.0	Anthony Wong
20/12/2005	94.0	94.0	Anthony Wong
23/12/2005	94.0	94.0	Anthony Wong
28/12/2005	94.0	94.0	Anthony Wong
30/12/2005	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
02/12/2005	94.0	94.0	Anthony Wong
06/12/2005	94.0	94.0	Anthony Wong
09/12/2005	94.0	94.0	Anthony Wong
13/12/2005	94.0	94.0	Anthony Wong
16/12/2005	94.0	94.0	Anthony Wong
20/12/2005	94.0	94.0	Anthony Wong
23/12/2005	94.0	94.0	Anthony Wong
28/12/2005	94.0	94.0	Anthony Wong
30/12/2005	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.