

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: 13-8-04 Hour of Visit: 11:30
 Staff name: H.K.TSANG HVAS SN: 2198
 Used filter paper no.: LR26 New filter paper no.: LR28
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{32+273}{305}$ K Pressure, $P_a = 1001$ 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: 5.5
 Adjustment of flow controller (Y/N): N
 Manometer reading after calibration: 5.5

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

HIGH VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: EG Site No.: AM2
 Date of visit: 11-8-2004 Hour of Visit: 11:30
 Staff name: W L MAK HVAS S/N: 2195
 Used filter paper no.: LR27 New filter paper no.: LR29
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{273 + 36.1}{309.1}$ K Pressure, $P_a = 1007$ 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)	$\Delta H_a = 18.0(T_a/P_a) =$ _____
✓ 1535(09/2003)	$\Delta H_a = 18.2(T_a/P_a) =$ <u>5.58</u>

Manometer reading before calibration: 5.80

Adjustment of flow controller (Y/N): Y

Manometer reading after calibration: 5.60

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: ASH LAGOON Site Number: Am3
Date of Visit: 13-8-2004 Hour of Visit: 11:25
Staff Name: W. L. MAK Partisol S/N: 2000B20550000
Used Filter No.: PC11 New Filter No.: PC12
Ambient temperature: 32.4 Ambient pressure: 1005

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 $\pm 2^{\circ}\text{C}$)
30.6 $^{\circ}\text{C}$ Before Calibration: Y/N $^{\circ}\text{C}$ After
2. Pressure Check (Ambient pressure ± 20 mbar)(factor = 0.000987)
0.986 mbar Before Calibration: Y/N mbar After
3. Flow Check (16.7 \pm 1.1 litre/min)
16.60 l/min Before Calibration: Y/N l/min After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYV Site No.: Am 4
Date of visit: 11-8-04 Hour of Visit: 11:10
Staff name: H.K. TANG MINIVOL S/N: 903
Used filter paper no.: ME90 New filter paper no.: ME91

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: ✓
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 : August

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)
4/8/2004	262.34	0.119	4	1.00	15.67
10/8/2004	263.10	0.123	4	1.00	15.66
16/8/2004	263.17	0.131	4	1.00	15.66
22/8/2004	263.16	0.139	4	1.00	15.66
28/8/2004	262.84	0.151	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)
4/8/2004	248.05	0.045	4	1.00	15.64
10/8/2004	247.93	0.046	4	0.99	15.64
16/8/2004	247.66	0.046	4	1.00	15.64
22/8/2004	247.23	0.050	4	1.00	15.65
28/8/2004	246.55	0.044	4	1.00	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)
4/8/2004	254.02	0.027	4	0.99	15.63
10/8/2004	253.87	0.029	4	1.00	15.64
16/8/2004	253.63	0.033	4	0.99	15.64
22/8/2004	253.31	0.031	4	1.01	15.64
28/8/2004	252.96	0.068	4	0.98	15.63

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 11-8-04 Time 10:15

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)) 94.2

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 13-8-04 Time 10:55

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 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 August 2004

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

Noise Equipment Used: RION NL-14/RION NL-31

Calibrator Used: RION NC-73/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
03/08/2004	94.0	94.0	Esther Luk
06/08/2004	94.0	94.0	Esther Luk
10/08/2004	94.0	94.0	Esther Luk
13/08/2004	94.0	94.0	Esther Luk
17/08/2004	94.0	94.0	Esther Luk
20/08/2004	94.0	94.0	Esther Luk
24/08/2004	94.0	94.0	Esther Luk
27/08/2004	94.0	94.0	Anthony Wong
31/08/2004	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
03/08/2004	94.0	94.0	Esther Luk
06/08/2004	94.0	94.0	Esther Luk
10/08/2004	94.0	94.0	Esther Luk
13/08/2004	94.0	94.0	Esther Luk
17/08/2004	94.0	94.0	Esther Luk
20/08/2004	94.0	94.0	Esther Luk
24/08/2004	94.0	94.0	Esther Luk
27/08/2004	94.0	94.0	Anthony Wong
31/08/2004	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.