

# 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: 15-12-04 Hour of Visit: 15:30  
 Staff name: H.K. ISANI HVAS S/N: 2198  
 Used filter paper no.: LR69 New filter paper no.: LR71  
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature,  $T_a = \frac{24.3 + 27.3}{2} = 25.8$  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 <sub>2</sub> O)
1534(09/2004)	$\Delta H_a = 18.33(T_a/P_a) = 5.38$

Manometer reading before calibration: 5.7  
 Adjustment of flow controller (Y/N): Y  
 Manometer reading after calibration: 5.4

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: EG Site No.: Am 2  
 Date of visit: 16-12-2004 Hour of Visit: 1035  
 Staff name: W. L. MAK HVAS S/N: 2195  
 Used filter paper no.: LR70 New filter paper no.: LR72  
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature,  $T_a = \frac{273 + 23.1}{296.1}$  K Pressure,  $P_a = 1020$  mb

II. Correction of manometer reading

Calibration orifice No.	Manometer reading at site conditions corresponds to $Q_{STD} = 40$ ft <sup>3</sup> /min. (inch H <sub>2</sub> O)
1534(09/2004)	$\Delta H_a = 18.33(T_a/P_a) = 5.32$

Manometer reading before calibration: 5.40  
 Adjustment of flow controller (Y/N): N  
 Manometer reading after calibration: 5.40

Note: Tolerance Limit of HVAS flow:  $\pm 1.0$  ft<sup>3</sup>/min. Corresponding limits for manometer :  $\pm 0.2$  inch H<sub>2</sub>O

III. General Conditions of HVAS

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

IV. Remarks

\_\_\_\_\_  
 \_\_\_\_\_

PARTISOL TSP SAMPLER  
SITE VISIT LOG SHEET

Site Name: A.L. Site Number: AM3  
Date of Visit: 15-12-04 Hour of Visit: 11:00  
Staff Name: H.K. Tsang Partisol S/N: 2000B205500001  
Used Filter No.: PC 31 New Filter No.: PC32  
Ambient temperature: 23.5° Ambient pressure: 1015 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 ✓
5. Clean / ~~Replace~~ piston ✓

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

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

23.5 °C Before Calibration: Y (N) 23.5 °C After

2. Pressure Check (Ambient pressure  $\pm 20$  mbar)(factor = 0.000987)

1.007 <sup>hPa</sup> mbar Before Calibration: Y (N) 1020 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.: AM.4

Date of visit: 16-12-04 Hour of Visit: 10:10

Staff name: H.K. TSANG MINIVOL S/N: 803

Used filter paper no.: MH16 New filter paper no.: MH17

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

5.00 Before 5.00 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 : December

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)
2/12/2004	252.98	0.035	4	1.00	15.65
8/12/2004	254.99	0.021	4	1.00	15.65
14/12/2004	254.51	0.029	4	1.00	15.68
20/12/2004	254.05	0.036	4	1.00	15.68
26/12/2004	253.63	0.034	4	1.00	15.68

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)
2/12/2004	246.01	0.048	4	0.99	15.65
8/12/2004	245.44	0.046	4	1.00	15.65
14/12/2004	244.97	0.047	4	1.00	15.63
20/12/2004	245.89	0.043	4	1.00	15.65
26/12/2004	245.46	0.053	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)
2/12/2004	253.38	0.048	4	0.99	15.64
8/12/2004	254.48	0.035	4	1.00	15.64
14/12/2004	253.98	0.052	4	1.00	15.64
20/12/2004	253.67	0.036	4	1.00	15.64
26/12/2004	254.57	0.044	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 : Ch

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

Location Ash Lagoon/Ching Lam\*

Date 13-12-04 Time 10:35

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)) 93.9

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

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

Location Ash Lagoon/~~Ching Lam~~\*

Date 15-12-04 Time 11:34

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)) 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 December 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
03/12/2004	94.0	94.0	Anthony Wong
07/12/2004	94.0	94.0	Anthony Wong
10/12/2004	94.0	94.0	Anthony Wong
14/12/2004	94.0	94.0	Anthony Wong
17/12/2004	94.0	94.0	Anthony Wong
21/12/2004	94.0	94.0	Anthony Wong
24/12/2004	94.0	94.0	Anthony Wong
28/12/2004	94.0	94.0	Anthony Wong
31/12/2004	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
03/12/2004	94.0	94.0	Anthony Wong
07/12/2004	94.0	94.0	Anthony Wong
10/12/2004	94.0	94.0	Anthony Wong
14/12/2004	94.0	94.0	Anthony Wong
17/12/2004	94.0	94.0	Anthony Wong
21/12/2004	94.0	94.0	Anthony Wong
24/12/2004	94.0	94.0	Anthony Wong
28/12/2004	94.0	94.0	Anthony Wong
31/12/2004	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.