

# 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: 14-2-2006 Hour of Visit: 1045  
 Staff name: W. L. MAK HVAS S/N: 2198  
 Used filter paper no.: LT17 New filter paper no.: LT19  
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature,  $T_a = \frac{273 + 22.4}{295.4} \text{ K}$  Pressure,  $P_a = 1014 \text{ mb}$

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)
1535(09/2005)	$\Delta H_a = 19.29(T_a/P_a) = 5.6''$

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:  $\pm 1.0 \text{ ft}^3/\text{min}$ . Corresponding limits for manometer :  $\pm 0.2 \text{ inch H}_2\text{O}$

III. General Conditions of HVAS

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IV. Remarks

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HIGH VOLUME AIR SAMPLER  
SITE VISIT LOG SHEET

Site Name: E.G. Site No.: A42.  
 Date of visit: 14-2-06 Hour of Visit: 11:20  
 Staff name: W.L.MAK, H.K.TAN HVAS S/N: 2185  
 Used filter paper no.: LT18 New filter paper no.: LT20  
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature,  $T_a = \overset{22.2+273}{295.2}$  K Pressure,  $P_a = 1017$ , 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)
1535(09/2005)	$\Delta H_a = 19.29(T_a/P_a) = 5.6$

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:  $\pm 1.0$  ft<sup>3</sup>/min. Corresponding limits for manometer :  $\pm 0.2$  inch H<sub>2</sub>O

III. General Conditions of HVAS

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IV. Remarks

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PARTISOL TSP SAMPLER  
SITE VISIT LOG SHEET

Site Name: A.L. Site Number: AM3  
Date of Visit: 14-2-06 Hour of Visit: 10:00  
Staff Name: W.L. MAK ; H.K. TSANG Partisol S/N: 2000B20755C410  
Used Filter No.: PD06 New Filter No.: PD07  
Ambient temperature: 22.2°C Ambient pressure: 1018 mbar.

I. General Services

1. Replace control unit Large In-line Filter X
2. Clean the sample inlet head ✓
3. Clean sample tube X
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  $\pm 2^\circ\text{C}$ )

22.2 °C Before Calibration: Y/N 22.2 °C After

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

1018 mbar Before Calibration: Y/N 1025 mbar After

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

16.8 l/min Before Calibration: Y/N 16.8 l/min After

III. Remarks

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MINI VOLUME AIR SAMPLER  
SITE VISIT LOG SHEET

Site Name: TYV Site No.: AM4  
Date of visit: 14-2-06 Hour of Visit: 10:45  
Staff name: H. K. TSANG MINIVOL S/N: 33P3  
Used filter paper no.: MHP0 New filter paper no.: MHP1

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: 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

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**THE HONGKONG ELECTRIC CO., LTD.  
LAMMA POWER STATION EXTENSION  
TEOM 1400A CONTINUOUS DUST MONITOR  
DATA QUALITY ASSURANCE LOG SHEET**

Month : February

Year : 2006

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)
1/2/2006	257.34	0.029	4	1.00	15.68
7/2/2006	257.08	0.034	4	1.00	15.68
13/2/2006	256.48	0.025	4	1.00	15.68
19/2/2006	256.33	0.024	4	1.00	15.68
25/2/2006	255.93	0.033	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)
1/2/2006	244.49	0.035	4	0.99	15.63
7/2/2006	244.08	0.038	4	1.00	15.63
13/2/2006	243.76	0.045	4	0.99	15.64
19/2/2006	243.32	0.032	4	1.00	15.63
25/2/2006	245.87	0.054	4	1.00	15.64

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)
1/2/2006	248.61	0.034	4	0.99	15.67
7/2/2006	248.42	0.049	4	1.01	15.67
13/2/2006	248.22	0.048	4	1.00	15.67
19/2/2006	248.01	0.036	4	1.01	15.67
25/2/2006	247.94	0.049	4	1.01	15.67

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:

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Prepared by :           Alex          

Checked by :           Re

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

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

Date 14-2-06 Time 10:30

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)) 94.0

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

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Note: \* - Please delete where inappropriate

18/5/2004

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

Location Ash Lagoon/Ching Lam\*

Date 24-2-06 Time 11:00

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

B&K 4231  
RION NC-74-1

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

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Note: \* - Please delete where inappropriate

18/5/2004

## Equipment Calibration Record for February 2006

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
01/02/2006	94.0	94.0	C K Law
03/02/2006	94.0	94.0	C K Law
07/02/2006	94.0	94.0	C K Law
10/02/2006	94.0	94.0	C K Law
14/02/2006	94.0	94.0	C K Law
17/02/2006	94.0	94.0	C K Law
21/02/2006	94.0	94.0	C K Law
24/02/2006	94.0	94.0	C K Law
28/02/2006	94.0	94.0	C K Law

Measurement Location: N5 – Pak Kok Tsui No. 8

Date	Calibration Level before Measurement (dB(A))	Calibration Level after Measurement (dB(A))	Calibrated by
01/02/2006	94.0	94.0	C K Law
03/02/2006	94.0	94.0	C K Law
07/02/2006	94.0	94.0	C K Law
10/02/2006	94.0	94.0	C K Law
14/02/2006	94.0	94.0	C K Law
17/02/2006	94.0	94.0	C K Law
21/02/2006	94.0	94.0	C K Law
24/02/2006	94.0	94.0	C K Law
28/02/2006	94.0	94.0	C K Law

Note: Measurement accepted as valid only if the calibration levels from before and after the noise measurement agreed to within 1.0 dB.