

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: 16-5-2006 Hour of Visit: 0745
 Staff name: W.L MAK/HK TSANG HVAS S/N: 2198
 Used filter paper no.: LT48 New filter paper no.: LT50
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{273+26.5}{299.8}$ K Pressure, $P_a = 1.005$ 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 ₂ O) |
|-------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1535(09/2005) | $\Delta H_a = 19.29(T_a/P_a) = 5.75''$ |

Manometer reading before calibration: 5.80'
 Adjustment of flow controller (Y/N): N
 Manometer reading after calibration: 5.80''

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: E.G. Site No.: 117
 Date of visit: 16-5-05 Hour of Visit: 10:20
 Staff name: W.L. MAK / H.K. TSANG HVAS S/N: 2195
 Used filter paper no.: LT4P New filter paper no.: LT51
 Type of filter: Glass-fibre

I. Ambient Conditions

Temperature, $T_a = \frac{26.9 + 27.3}{2} = 27.1$ K Pressure, $P_a = 1010$ 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) | $\Delta H_a = 19.29(T_a/P_a) = 5.73$ |

Manometer reading before calibration: 5.8
 Adjustment of flow controller (Y/N): N
 Manometer reading after calibration: 5.8

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: AM 3
Date of Visit: 13-5-2006 Hour of Visit: 15:50
Staff Name: W. L. MAK Partisol S/N: 2000 B 20755 C 410
Used Filter No.: PD 21 New Filter No.: PD 22
Ambient temperature: 30.2 °C Ambient pressure: 1009

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 $\pm 2^\circ\text{C}$)

29.5 °C Calibration: ✓/N N °C
Before After

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

1006 mbar Calibration: ✓/N N mbar
Before After

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

16.7 l/min Calibration: ✓/N N l/min
Before After

III. Remarks

MINI VOLUME AIR SAMPLER
SITE VISIT LOG SHEET

Site Name: TYU Site No.: AM4
Date of visit: 15-5-06 Hour of Visit: 13:45
Staff name: HKISAW G MINIVOL S/N: 3393
Used filter paper no.: MI05 New filter paper no.: MI06

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: x
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 : May 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) |
| 2/5/2006 | 255.54 | 0.036 | 4 | 1.00 | 15.68 |
| 8/5/2006 | 257.26 | 0.027 | 4 | 1.00 | 15.68 |
| 14/5/2006 | 257.13 | 0.055 | 4 | 1.00 | 15.68 |
| 20/5/2006 | 256.74 | 0.036 | 4 | 1.00 | 15.68 |
| 26/5/2006 | 256.64 | 0.036 | 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) |
| 2/5/2006 | 246.31 | 0.041 | 4 | 0.99 | 15.63 |
| 8/5/2006 | 246.02 | 0.067 | 4 | 0.99 | 15.62 |
| 14/5/2006 | 245.89 | 0.064 | 4 | 0.99 | 15.63 |
| 20/5/2006 | 245.49 | 0.040 | 4 | 0.99 | 15.62 |
| 26/5/2006 | 245.36 | 0.036 | 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) |
| 3/5/2006* | 248.50 | 0.031 | 4 | 1.00 | 15.66 |
| 8/5/2006 | 248.53 | 0.038 | 4 | 1.00 | 15.66 |
| 14/5/2006 | 248.43 | 0.031 | 4 | 1.00 | 15.66 |
| 20/5/2006 | 248.12 | 0.030 | 4 | 1.00 | 15.66 |
| 26/5/2006 | 248.04 | 0.032 | 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:

The 1-hr TEOM TSP sampler at Ash Lagoon (AM3) was found defect on 2-5-06. Make-up 1-hr TSP sampling was conducted on 3-5-06.

Prepared by : Sbo

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 18-5-06 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

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 18-5-06 Time 11:30

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)) 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 May 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 |
|------------|----------------------------------------------|---------------------------------------------|---------------|
| 02/05/2006 | 94.0 | 94.0 | C K Law |
| 04/05/2006 | 94.0 | 94.0 | C K Law |
| 09/05/2006 | 94.0 | 94.0 | C K Law |
| 12/05/2006 | 94.0 | 94.0 | C K Law |
| 16/05/2006 | 94.0 | 94.0 | C K Law |
| 19/05/2006 | 94.0 | 94.0 | C K Law |
| 23/05/2006 | 94.0 | 94.0 | C K Law |
| 26/05/2006 | 94.0 | 94.0 | C K Law |
| 30/05/2006 | 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 |
|------------|----------------------------------------------|---------------------------------------------|---------------|
| 02/05/2006 | 94.0 | 94.0 | C K Law |
| 04/05/2006 | 94.0 | 94.0 | C K Law |
| 09/05/2006 | 94.0 | 94.0 | C K Law |
| 12/05/2006 | 94.0 | 94.0 | C K Law |
| 16/05/2006 | 94.0 | 94.0 | C K Law |
| 19/05/2006 | 94.0 | 94.0 | C K Law |
| 23/05/2006 | 94.0 | 94.0 | C K Law |
| 26/05/2006 | 94.0 | 94.0 | C K Law |
| 30/05/2006 | 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.