# Appendix F

## The QA/QC Procedures and Results

# HIGH VOLUME AIR SAMPLER
# SITE VISIT LOG SHEET

| | | | |
|---|---|---|---|
| Site Name: | R.E. | Site No.: | AM 1 |
| Date of visit: | 20-1-2005 | Hour of Visit: | 0950 |
| Staff name: | W. L. MAK | HVAS S/N: | 2198 |
| Used filter paper no.: | LR82 | New filter paper no.: | LR84 |
| Type of filter: | Glass-fibre | | |

## I. Ambient Conditions

Temperature, $T_a$ = 273 + 19.8 = 292.8 K Pressure, $P_a$ = 1023 mb

## II. Correction of manometer reading

| Calibration orifice No. | Manometer reading at site conditions corresponds to $Q_{STD}$ = 40 $ft^3$/min. (inch $H_2O$) |
|---|---|
| 1534(09/2004) | $\Delta H_a = 18.33(T_a/P_a)$ = 5.24 |

Manometer reading before calibration: 5.50"
Adjustment of flow controller (Y/N): Y
Manometer reading after calibration: 5.20"

Note: Tolerance Limit of HVAS flow: ± 1.0 $ft^3$/min. Corresponding limits for manometer : ± 0.2 inch $H_2O$

## III. General Conditions of HVAS

## IV. Remarks

File Name: C:\monitor\ambient\hvprical\HVASCAL04.doc

# HIGH VOLUME AIR SAMPLER
# SITE VISIT LOG SHEET

| | | | |
|---|---|---|---|
| Site Name: | E.G | Site No.: | AM 2 |
| Date of visit: | 20-1-2005 | Hour of Visit: | 1055 |
| Staff name: | W.L. MAK/HK TSANG | HVAS S/N: | 2195 |
| Used filter paper no.: | LR83 | New filter paper no.: | LR85 |
| Type of filter: | Glass-fibre | | |

## I. Ambient Conditions

Temperature, $T_a$ = 273+18.0 / 291.0 K Pressure, $P_a$ = 1025 mb

## II. Correction of manometer reading

| Calibration orifice No. | Manometer reading at site conditions corresponds to $Q_{STD}$ = 40 $ft^3$/min. (inch $H_2O$) |
|---|---|
| 1534(09/2004) | $\Delta H_a = 18.33(T_a/P_a)$ = 5.20" |

Manometer reading before calibration: 5.50"
Adjustment of flow controller (Y/N): Y
Manometer reading after calibration: 5.20"

Note: Tolerance Limit of HVAS flow: ± 1.0 $ft^3$/min. Corresponding limits for manometer : ± 0.2 inch $H_2O$

## III. General Conditions of HVAS

## IV. Remarks

File Name: C:\monitor\ambient\hvprical\HVASCAL04.doc

PARTISOL TSP SAMPLER
SITE VISIT LOG SHEET

Site Name: A.L  Site Number: AM 3

Date of Visit: 20-1-05  Hour of Visit: 10:20

Staff Name: H.K. Tsang  Partisol S/N: 2000B 2055 00001

Used Filter No.: PC 37  New Filter No.: PC38

Ambient temperature: 18.9  Ambient pressure: 1025 mbr

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 ± 2°C)**

19 °C Before  Calibration: Y / (N)  19 °C After

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

1.008 ~~mbar~~ atm. Before  Calibration: Y / (N)  1021 mbar After

3. Flow Check **(16.7± 1.1 litre/min)**

17.0 l/min Before  Calibration: Y / (N)  17.0 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: 10-1-05 Hour of Visit: 11:00

Staff name: W.L.MAK, H.K.YAMMY MINIVOL S/N: 3382

Used filter paper no.: MH20 New filter paper no.: MH21

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: ✓
4. Clean Impaction Inlet: ✓
5. Replace Timer Battery Every 6 months: ✓
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 : January 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) |
| 1/1/2005 | 233.63 | 0.034 | 4 | 1.00 | 15.68 |
| 7/1/2005 | 253.42 | 0.037 | 4 | 1.00 | 15.68 |
| 13/1/2005 | 254.09 | 0.046 | 4 | 1.00 | 15.68 |
| 19/1/2005 | 253.67 | 0.038 | 4 | 1.00 | 15.68 |
| 25/1/2005 | 253.35 | 0.036 | 4 | 1.00 | 15.68 |
| 31/1/2005 | 253.21 | 0.052 | 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) |
| 1/1/2005 | 245.02 | 0.039 | 4 | 1.00 | 15.65 |
| 7/1/2005 | 244.41 | 0.041 | 4 | 1.01 | 15.64 |
| 13/1/2005 | 245.79 | 0.029 | 4 | 0.99 | 15.65 |
| 19/1/2005 | 245.37 | 0.048 | 4 | 0.99 | 15.65 |
| 25/1/2005 | 245.05 | 0.041 | 4 | 1.00 | 15.64 |
| 31/1/2005 | 244.91 | 0.045 | 4 | 0.99 | 15.66 |

| 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) |
| 1/1/2005 | 261.80 | 0.048 | 4 | 1.01 | 15.68 |
| 7/1/2005 | 261.19 | 0.029 | 4 | 1.01 | 15.68 |
| 13/1/2005 | 260.66 | 0.040 | 4 | 1.01 | 15.68 |
| 19/1/2005 | 260.22 | 0.027 | 4 | 1.01 | 15.68 |
| 25/1/2005 | 262.15 | 0.040 | 4 | 1.01 | 15.69 |
| 31/1/2005 | 262.05 | 0.032 | 4 | 1.01 | 15.68 |

| 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 : [illegible]

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

Location Ash Lagoon/~~Ching Lam*~~

Date 14-1-05 Time 10:40.

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/c~~loudy/showery/heavy rain*~~

b. ~~Strong wind~~/breeze/~~calm*~~

3. Remark/Observation

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 14-1-05 Time 11:20

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/c~~loudy/showery/heavy rain*~~

b. ~~Strong wind~~/breeze/~~calm*~~

3. Remark/Observation

Note: * - Please delete where inappropriate

18/5/2004

# Equipment Calibration Record

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 |
|---|---|---|---|
| 04/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 07/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 11/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 14/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 18/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 21/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 25/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 28/01/2005 | 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 |
|---|---|---|---|
| 04/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 07/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 11/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 14/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 18/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 21/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 25/01/2005 | 94.0 | 94.0 | Anthony Wong |
| 28/01/2005 | 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.