

Ambient Air Quality Monitoring Workshop

Wellington

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Setting up your Monitoring Sites

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GPG – Section 5

Site Selection

- Identify purpose for monitoring
- Determine most appropriate monitoring methods
- Situate site as best as possible to obtain a representative sample (ref. EPI categories and site descriptions)

Practical Considerations

- Access to power, telephone line if required
- Security
- What permission is needed to use the site
- Be aware of any possible disruption your activities may cause to occupiers
 - Be sure to reach a clear understanding between all parties involved

Practical Considerations cont.

- Consider the duration of monitoring requirement
 - Short-term only
 - Short-term, with possible repeat exercises
 - Frequency of repeat exercises
 - Long-term defined monitoring period
 - Long-term, undefined monitoring period

GPG Section 6

Site Management

- Determine frequency of routine site visits
 - Site-log should be pre-formatted
 - Draw up check sheets and equipment maintenance schedules
- Provide training for additional support staff if required

Site Management cont.

- Plan for appropriate level of surveillance of all technology
 - Remote site management options
- Plan equipment operations and data checking frequency
 - Documentation to record all activities

Site Management cont.

- Calibration checks
 - Preferably every 24 hours: zero and span
- Manual Calibrations
 - Preferably once a month: zero and two span
- Multi-point calibrations
 - For short-term programs, prior to installation and upon removal
 - For long-term programs, every six months as a minimum

Site Management cont.

- Traceability
 - Record all calibration sources
 - Unique identifiers for zero and span gases
 - Unique identifiers for all equipment involved – incl. analyser and dilution/mixing equipment
 - Record all calculations
 - Strip Chart records
 - Record all instrumental output
 - Compare with electronically recorded data at regular intervals

Site Management cont.

- Traceability – for batch samples
 - Document all links involved for chain of evidence
 - Pre-formatted document supplied to each linkage
 - Ensure each linkage is contacted before sample is sent

GPG Section 7

- Auxiliary Information
 - Should include unique identifiers for;
 - Location
 - Relevant contact persons
 - Parameters measured
 - Equipment in use
 - Verification of set-up for instruments

Auxiliary Information cont.

- Site description, e.g. category
 - Record any deviations from the ideal, such as proximity to trees, buildings, topographical features, etc.
- Site classification
 - Purpose of monitoring