



National Physical Laboratory

Welcome to ARMUG 2007

Steven Judge

Julian Dean

Topics for today

- The feasibility of a Workplace Air Monitoring Good Practice Guide
- Environment Agency requirements for monitoring radioactivity in air
- Tritium Good Practice Guide
- A Transfer Instrument for the Calibration of Positron-in-Air Monitors
- Workshop on Instrument and Measurement Problems

Housekeeping

- The fire alarm is a voice alarm system. In the event of an alarm, the assembly point is the lawn opposite the main entrance.
- Lunch will be served downstairs at 12:30
- The meeting should end around 15:00. Tea/coffee available if you would like to stay on.
- Please switch off mobile phones

Minutes

- Any corrections / comments on minutes of the previous meeting?

Actions arising (1)

- 6.1: Adsorption factors: David Ryden, John Simpson and Pete Burgess to meet to draft guidance.
- 6.2: ARMUG questionnaire – open but no replies.
- 6.3: Topics for discussion at ARMUG: AWE have expressed an interest in giving a presentation on air monitoring procedures at the 2008 meeting.
- 6.4: FAQs – draft is available for comment on the ARMUG webpage. Please send comments to Julian Dean by 30th November. Further input may be taken from the workshop this afternoon.

Questions

- *Q1. What factors should be considered when selecting a monitor?*
- *Q2. What are the pros and cons of different detector types?*
- *Q3. Where should a safe alarm limit be set to avoid false alarms?*
- *Q4. When should monitoring be carried out?*
- *Q5. Where should the sampling head be positioned?*
- *Q6. When should alarms be set, and when should retrospective measurements be done?*
- *Q7. What sampling times should be adopted ?*

- *Q8. Why are particular flow rates used?*
- *Q9. What are the effects of long-term deposition on filter paper, and how should the filters be maintained?*
- *Q10. What are the influences of pipe fittings between the sampling point and detector?*
- *Q11. What methods are available for radon compensation?*
- *Q12. Which reference sources should be used for instrument calibration?*
- *Q13. What are the main sources of measurement uncertainty?*
- *Q14. Where can Type Test data be found?*
- *Q15. Which standards and specifications must be complied with?*
- *Q16. What are other possible sources of information?*
- *Q17. Is there a glossary of terms (e.g. DAC, DAC.h) available?*

Actions arising (2)

- 6.5: Tritium monitoring GPG. Convened by Trevor Birkett, making good progress. John Simpson will present a summary.
- 6.6: Guidance on positioning of air monitors – presentation later today
- 6.7: Provision of low-activity air filters for comparison exercises – some supplies found, project in the 2007-10 NPL programme.

Agenda (am)

- Feasibility of a workplace air monitoring GPG (*Stuart Fannin, UKAEA & Pete Burgess, NPL*)
- Environmental Agency requirements for monitoring radioactivity in air (*Granville Roberts, EA*)
- Tritium Good Practice Guide (*John Simpson, Nukem*)
- Transfer instrument for the calibration of positron-in-air monitors (*Pete Burgess, NPL*)

Workshop

- This forum exists to help you assay airborne radioactivity accurately
- This workshop aims to identify your current issues and find a solution (or identify a way forward)

- Please divide into groups of 7 or 8 people
- Choose a spokesperson for the group
- Brainstorm (using post-it notes) for 10 minutes any instrument or measurement issues
- Collate the notes and identify common issues
- Select 2 or 3 of the main issues for discussion: what exactly is needed, how could it be addressed, by whom? (10 minutes)
- Feedback to the Forum

Thank you and have a safe journey
home