

18th Annual AMUG Meeting, Argonne National Laboratory, Bldg 401, APS

Radioactive Air Sampling (and Monitoring) Methods

Summary of April 4, 2006

Points of Discussion on 3/4:

- Ambient vs. Standard correction (whither STP?)
 - Sampling *and* Monitoring are discussed in the book
 - Isokinetics in stack sampling: does not apply in all cases
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1. Stack Sampling Chapter: considerations
 - a. ANSI 13.1 (1999) presents issues for implementation
 - i. Paul Frame to M. Maiello: ANSI 13.1 is not the way stack sampling is done
 - ii. Comment may refer to easier to use older version of std. Vs. 1999 version
 - iii. AMUG participants: No air sampler placement instructions in 13.1
 - b. Section should be written, how? Suggestion: as a survey section.
 - i. **Need: an outline of this section from John Glissmeyer.**
2. Standards: considerations
 - a. Instrument based
 - b. International in coverage
 - c. Book discusses the science of air sampling. Instruments are not covered in any great detail.
 - d. Section should be written, how?
 - i. Suggestion: include an explanation of –
 1. need for standards (need for quality results)
 2. dynamic situation re: standards (constant renewal)
 3. Mark Hoover: Provide list of air sampling vendors (justifies section)
3. Regulations: Suggested chapter or section
 - a. Potential author: Cindy Jones, NRC
 - b. Contents: US regs concerning radioactivity in air (NRC & Agreement State regs; EPA regs; any others?)
4. Radiation Safety Chapter – M. Maiello
 - a. Where to put it?
 - i. Appendix? (sends message of less importance)
 - ii. With the other chapters (sends message of more importance)
 - iii. Part of Review of Radioactivity Chapter

5. "Measurement Overview" or Preface
 - a. Mention sampling objectives:
 - i. To calculate dose
 - ii. Should have text and organization that follows the final Table of Contents (TOC)

6. TOC: most important suggested change -
 - Chapter 6– Sampling Train (multiple authors)
 - Overview – M. Maiello
 - Filtration – M. Hoover
 - Adsorption –
 - Other collecting media (cold traps, chemical bubbling) -

 - Chapter 7 - Sampling Applications
 - Workplace
 - Stack Sampling
 - Environmental
 - Emergency

7. Physics of Aerosols and Behavior of Aerosols & Gases
 - a. E. Sajo and M. Hoover to work together to produce a single chapter

8. Introduction to CAM – J. Rodgers
 - a. Not a method (as was before), but an intro to CAM
 - b. Advances in CAM might be mentioned

9. Combine Rn and CAM