

**U.S. ENVIRONMENTAL PROTECTION AGENCY
SCIENCE ADVISORY BOARD
ENVIRONMENTAL ENGINEERING COMMITTEE**

MEETING

June 17-18, 2003

Location – Buchanan Room on the Lower Level
The Willard Intercontinental
14th and Pennsylvania Ave, NW
Final Agenda

Tuesday June 17, 2003

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|------|---|------------------------|
| 9:00 | Opening Remarks | Dr. Grasso & Ms. White |
| 9:10 | Description of Ethics Procedures &
Availability of Biosketches | Ms. White |
| 9:15 | Introductions | |
| 9:20 | Welcome | Dr. Vu |
| 9:30 | Briefing on OSWER's Resource Conservation Challenge
Mr. Robert Springer, Director
Office of Solid Waste | |

Leaching Consultation

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| 10:00 | Introduction and Broader Policy Context for the Consultation
Mr. Robert Dellinger, Director, Hazardous Waste Identification Division
Office of Solid Waste | |
| 10:10 | Program Background and Charge to the Committee
Mr. Greg Helms, Hazardous Waste Identification Division
Office of Solid Waste | |
| 10:40 | Roadmap for Long-term Research on Leaching
Dr. Souhail Al-Abed, National Risk Management Research Laboratory (CINTI)
Office of Research and Development | |
| 11:20 | Current Extramural Research
Dr. David Kosson, Chairman of Civil and Environmental Engineering
Vanderbilt University | |
| 12:00 | LUNCH | |
| 1:00 | Application of Current Research
Ms. Susan Thorneloe, National Risk Management Research Laboratory (RTP)
Office of Research and Development | |

1:30 Leach Testing in Environmental Assessment of the Reuse of Materials
Dr. Taylor Eighmy
University of New Hampshire

2:10 Public comment
Mr. David Case
The Environmental Technology Council (10 min)

2:20 Panel Discussion led by Dr. Dzombak

The Agency would welcome SAB reaction to its preliminary conclusions, which are:

- 1. Laboratory testing conditions should, to the degree possible, anticipate the plausible range of field conditions affecting waste leaching in disposal and reuse situations. These conditions will be most realistically represented by a distribution of values for factors affecting leaching, and testing should reflect this range of values to the degree possible.*
- 2. Conditions present at the end of a test (rather than initial test conditions) should be the basis for comparison with field conditions.*
- 3. For assessing metals leaching, pH is the strongest predictor of leaching potential in most cases. Other important factors include infiltration rate/liquid to solid ratio, the oxidation/reduction environment, effect of common ions and ionic strength, effects of external factors (codisposed waste, biological activity, etc), and exposure to ambient air. The relative importance of these factors is likely to vary for different wastes.*
- 4. These conclusions necessarily require the development of multiple leaching tests, or a flexible testing framework. Selection of suitable leaching test should be made based on a number of factors: anticipated use of test results (generic or site-specific), waste characterization, the range of plausible disposal or reuse conditions, and previously available information on the subject waste or similar wastes. Such information should include past leaching studies, chemical analysis, acid neutralization capacity, waste form and structural integrity/strength, and other relevant data.*
- 5. Modeling may also play an important role in relating laboratory and field conditions to one another, and in using leach test results to assess the leaching potential of waste.*

3:15 *Agency consideration of current research, and the potential to apply it to improve particular programs, specifically programs that do not now require the use of the TCLP.*

3:30 *The direction for long-term research work to further develop fundamental understanding of leaching that would improve the predictive capability of test suites or testing frameworks."*

3:50 Brief Break

4:00 Presentation and Discussion of Proposed SAB Reorganization
with SAB Executive Committee Chair, Dr. William Glaze.

5:00 Recap

6:00 ADJOURN

Wednesday June 18, 2003

- 9:00 Welcome and Overview of and Wednesday's Plans Dr. Grasso
- 9:05 Review of Leaching Consultation Charge and Ideas Raised Dr. Dzombak
- 10:30 Report Out to OSW on Leaching Consultation Committee
with Mr. Robert Dellinger, Director
Hazardous Waste Identification Division
Office of Solid Waste
- 12:00 LUNCH
- 1:00 Future of the EEC Dr. Grasso and Committee
- 4:00 ADJOURN