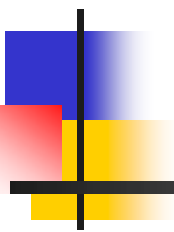


Managing the Nation's Radioactive Waste Legacy: Role of the Board on Radioactive Waste Management



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Board on Radioactive Waste Management

The National Academies

THE NATIONAL ACADEMIES

Advisers to the Nation on Science, Engineering, and Medicine



Who We Are

- The National Academies
 - National Academy of Sciences (NAS)
 - National Academy of Engineering (NAE)
 - Institute of Medicine (IOM)
 - National Research Council (NRC)
 - BRWM (1958)
- Private, nonprofit, Congressionally chartered (1863) to provide scientific and technological advice to the nation



How We Operate

- We respond to requests for advice from the executive and legislative branches of the federal government, and also from states
- We also identify issues that require national attention and address them through self-initiated studies
- Our studies are carried out by appointed committees of experts who volunteer their time
- Oversight of studies in particular issue areas is provided by “boards,” also comprised of volunteer experts
- All reports are required to pass a rigorous peer review before being issued



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Current BRWM Studies of Potential Interest

- Long-Term Institutional Management of DOE Legacy Waste Sites—Phase 2
- Regulation and Management of Low-Activity Radioactive Waste
- Transportation of Radioactive Waste
- Transportation Routing
- Waste Characterization at WIPP
- New Studies for DOE-EM



Long-Term Institutional Management—Phase 2 (LTIM/2)

- Follow-on study to 2000 LTIM report
- Study was to examine LTIM plans and practices for representative DOE sites and make recommendations for improvements
- EM requested that study be wrapped up ahead of schedule
- Status report is based on work to date (Moab, Fernald, and Mound)
- Report was released yesterday (April 30, 2003)



LTIM/2: Principal Findings and Recommendations

- Finding: Cleanup planning and long-term stewardship (LTS) planning are compartmentalized at the sites the committee visited
- Recommendations:
 - Explicitly plan for stewardship when making cleanup decisions
 - Involve stakeholders in the earliest phases of decisions that involve risk management
 - Initiate a national dialogue on LTS with other agencies with stewardship responsibilities



Low-Activity Waste

- Study will examine options for improving the regulation and management of “low-activity” radioactive waste (byproduct material, TENORM, other NORM, exempt material)
- Study in progress (3 meetings completed)
- Committee is visiting sites where wastes are generated and managed, and talking with experts and other interested members of the public
- Interim report expected in summer 2003; final report expected in summer 2004
- Sponsored by multiple federal agencies, including DOE



Transportation of Radioactive Waste

- Study will develop a high-level synthesis of key technical and societal issues for SNF and HLW transport in the United States and identify technical and policy options
- 24-month study; committee announced on April 25, 2003
- First meeting to be held in Washington, D.C. on May 16
- Sponsored by multiple organizations, including DOE



Transportation Committee Membership

Neal F. Lane, Rice University
(chair)

Thomas B. Deen, Independent
transportation consultant (vice
chair)

Julian Agyeman, Tufts University

Lisa M. Bendixen, ICF Consulting

Dennis C. Bley, Buttonwood
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John W. Poston, Sr., Texas A&M
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Elizabeth Q. Ten Eyck, ETE
Consulting

Seth Tuler, Clark University

Detlof von Winterfeldt,
University of Southern California

Thomas R. Warne, Tom Warne &
Associates LLC

Clive Young, Department for
Transport of the United
Kingdom



Transportation Routing

- Congressionally requested study to examine procedures used to select routes for transporting research reactor SNF (from government, university, and foreign research reactors) to/between DOE facilities
- Study will examine the extent to which procedures utilize assessments of risk
- 6-month study
- Awaiting funds from DOT to begin work



Characterization of Waste Destined for the Waste Isolation Pilot Plant (WIPP)

- Study will provide a review of DOE's program for characterizing contact handled waste destined for WIPP and will recommend improvements to increase the program's technical soundness, cost effectiveness, and safety to workers and the public
- Study in progress (three meetings completed)
- Committee has visited WIPP, waste generator sites, and interacted with regulators and stakeholders.
- Final report to be issued in late 2003



New Studies for DOE-EM

- Opportunities for Accelerating Characterization and Treatment of Waste at DOE Sites
 - Make more effective use of existing facilities
 - Achieving step improvements in characterization or treatment capabilities
 - Identification of needed technology investments
- Focused on large sites (RL, SRS, INEEL, OR)
- Start spring 2003; 15 months to completion



New Studies (Continued)

- Development of Risk-Based Approaches for Disposition of TRU and HLW
 - Key elements of a risk-based approach
 - Criteria for risk assessment
 - Compatibility with current regulatory regimes
 - Knowledge and technology gaps
 - Implications for disposition of other waste types
- Several DOE site visits planned
- Start spring 2003; 18 months to completion



Want More Information?

- Visit our “current projects” web site at www.national-academies.org. Click on “current projects” and search under the project title or “BRWM” to see all projects in progress.
- For a list of reports visit www.national-academies.org/brwm. Click on “publications.” Most reports can be read on line.
- Call us at 202-334-3066.