



SRS Citizens Advisory Board

Nuclear Materials Management Subcommittee

Meeting Record

April 27, 1999
Savannah River Site
F-Area

The Citizens Advisory Board (CAB) Nuclear Materials Management (NMM) subcommittee held a meeting on Tuesday, April 27, at the Savannah River Site in F Area to discuss the Department of Energy's (DOE) progress on the Nuclear Material Integration Project.

Citizens Advisory Board

Tom Costikyan
Wade Waters
Brendolyn Jenkins
Ed Tant
Jimmy Mackey
Ken Goad

Stakeholders

Mira Malek, SCDHEC
Mike French
Bill McDonnell
Mike French

DOE/Contractors

Jay Bilyeu, DOE
Charlie Anderson, DOE
Charlie Hansen, DOE
George Klipa, DOE
Scott Boeke, DOE
Drew Grainger, DOE
Donald Bridges, DOE
John Dickenson, WSRC
Craig Martin, WSRC
Jim French, WSRC
Donna Martin, WSRC
Douglas Berry, WSRC

Tom Costikyan, CAB NMM chair, welcomed those in attendance and asked for introductions. Jay Bilyeu, DOE-SR Materials and Facility Stabilization (MFS), then presented information on DOE's Nuclear Material Integration (NMI) Project.

Bilyeu introduced Charlie Hansen, Assistant Manager for Materials and Facility Stabilization, DOE-SR, who thanked the CAB for its interest and involvement in SRS nuclear material activities. Hansen previously worked at the Hanford Site in Richland, WA. He agreed with the need for complex-wide integration to stabilize materials.

Bilyeu began the presentation by explaining that the Nuclear Material Integration Project was chartered by Environmental Management (EM) to identify DOE's nuclear material inventories and determine disposition paths for excess nuclear materials of interest to EM. Goals include cost savings and program improvement. Specifically, the NMI focuses on nuclear materials owned by EM, those owned by other organizations, namely Defense Programs (DP), and Material Disposition (MD), and materials expected to transfer to EM by 2015. Three complex-wide teams were organized to evaluate the following materials: (1) Transuranic isotopes such as plutonium and americium, (2) Uranium/Thorium including highly

enriched uranium, and (3) Nonactinide isotopes and sealed sources such as cobalt, cesium and all sealed sources and standards.

The massive task of identifying all nuclear materials in the DOE complex began in 1998. To date, about 1000 baseline disposition maps have been defined, 300 alternative paths have been identified and disposition paths have been identified to accelerate the de-inventory of Mound, Fernald, Rocky Flats and Hanford Plutonium Finishing Plant.

Bilyeu emphasized that all information was pre-decisional. Bilyeu said about 99% of materials have identified, although only about 50% of baselines have been mapped of which only 50% of the plans have high confidence. Along side the project, DOE will have to develop a facility plan to identify facilities needed to accomplish stabilization work, a data management document listing all of the materials and amounts, a transportation plan and a research and development plan.

Potential integration opportunities impacting SRS include sending some Mound HEU (already accomplished), classified Rocky Flats metal, and Hanford fluorides and aluminum alloys to SRS as well as consolidating surplus plutonium at SRS. Materials recommended for transfer from SRS to Oak Ridge include americium and curium and uranium.

Another issue coming out of the NMI is a need for a policy for National Resource material (such as americium) and other potentially high value excess nuclear materials. According to Bilyeu, DOE can no longer generate some materials that were produced 15 to 40 years ago. Many of the materials have scientific and medical uses and may be regarded as future resources.

Other recommendations in the pre-decisional NMI include establishing management centers for consolidation of four major nuclear material groups, and developing a joint MD, DP and EM materials information system.

Discussion after the presentation focused on capabilities of the various DOE sites. Bilyeu said Rocky Flats , Hanford, and Los Alamos had minor plutonium processing capabilities.

Jim French, NMSS manager, WSRC, explained the process SRS is developing to stabilize americium/curium. A vitrification process similar to DWPF is used.

Costikyan asked if the budget situation would impact NMSS activities. It was acknowledged that activities falling below the target funding in FY2001 would be severely impacted such as placing some canyon operations on cold standby. Dickenson said the plutonium facilities at Hanford were placed in cold standby and the cost to start those again is reached \$1 billion. It was also pointed out that from 1995-1999, SRS restarted half of its facilities to stabilize materials identified in its Interim Management of Nuclear Materials EIS.

The current draft of the NMI shows there are no disposition plans for 40% of the country's nuclear materials. Many of the CAB members stated concern for the lack of national focus to manage the materials but were generally supportive of the NMI concept of integrating efforts.

Issues: Lack of stakeholder knowledge of NMI; potential lack of funding to operate facilities and stabilize materials; transportation: shipping containers do not exist for some materials, DOT regulations may be restrictive, public concern with transportation routes; and lack of communication among EM, DP and MD.

Action: Request a presentation on the FY2001 budget for Nuclear Materials Stabilization and Storage. Identify critical NMSS items that fall below the target level and may affect future SRS and NMI stabilization activities.

Meeting handouts may be obtained by calling 1-800-249-8155.