



SRS Citizens Advisory Board

**Nuclear Materials Committee
Meeting Summary**

**Aiken Federal Building, Aiken, SC
August 18, 2003**

The Citizens Advisory Board (CAB) Nuclear Materials Committee (NMC) met on Monday, August 18, 2003, at the Aiken Federal Building, Aiken, SC. The purpose of the meeting was to discuss the following topics: Plutonium Storage at SRS, DOE Response to DNFSB Concerns With Plutonium Storage, Storage and Disposition of EM Owned Plutonium at SRS, and to hear public comment. Attendance was as follows:

CAB Members

Jerry Devitt*
Murray Riley
Wade Waters*
Jean Sulc
William Lawrence*
Bill Willoughby*
Harold Rahn

Stakeholders

Karen Patterson
Russ Messick
Lee Poe
Rick Reicwer
Rick McLeod
Mike Schoener

DNFSB

R. Todd Davis

DOE/Contractors

Kevin Hall, DOE
George Mishra, DOE
Roger Rollins, DOE
Sachiko McAlhany, DOE
John Dickenson, WSRC
Howard Walls, WSRC
Robert Martini, WSRC
David Burke, WSRC
Teresa Haas, WSRC
Lyddie Broussard, WSRC

*NMC Members present

**Note: Perry Holcomb is a CAB member of the NMC, but was unable to attend this session.

Welcome and Introduction

Jerry Devitt, NMC Chair, welcomed the group at 5:00 PM, requested that each attendee introduce themselves and their affiliation. He announced the evening's topics and introduced Robert Martini as the first speaker.

Plutonium Storage at SRS

Robert Martini opened his presentation stating that he would describe the methodology used to determine that plutonium (Pu) storage was safe in the K-Area Material Storage (KAMS) and 235-F facilities.

He reminded the committee that the mission of KAMS was to provide a safe Pu storage environment in support of the accelerated deinventory of the Rocky Flats Environmental Technology Site (RFETS) as well as FB-Line at SRS. He listed the hierarchy of documents that established the requirements that must be adhered to when establishing the safety bases for KAMS.

Mr. Martini detailed the 9975 shipping package requirements and stated that from the beginning, these robust containers were considered the cornerstone of the KAMS safety program. In addition to the extensive pedigree established for the 9975, he explained that the Pu is first placed into 3013 containers. These containers meet the criteria for 50-year safe storage. He discussed the extensive testing that the 3013 containers and 9975 shipping packages undergo to meet certification requirements. According to Mr. Martini, the overall safety strategy is to place these packages into an equally robust facility to ensure the Pu remains safely stored. He characterized KAMS as a palletized storage facility designed so that no tool, equipment, or opportunity for operator error could harm the package and allow for a release of Pu.

Mr. Martini emphasized that to ensure a Pu release was beyond extremely unlikely (BEU), an extensive evaluation of events was conducted. If an event was determined to affect the BEU status, controls were established to maintain this status. He cited several examples of such events and associated controls that are included in the existing safety bases documents.

He further explained that while the current Documented Safety Analysis (DSA) complies with all site and regulatory requirements, work on a revision is now underway. If approved, the DSA would authorize the storage of Pu in KAMS beyond the current 10-year life expectancy. Mr. Martini provided additional details in response to numerous questions about the package design and facility requirements.

The second facility Mr. Martini discussed was 235-F. He stated that this facility provides another safe Pu storage environment, but also receives and ships Pu materials.

According to Mr. Martini, the safety analysis requirements for 235-F are the same as those described for KAMS. One difference is that the 235-F safety analysis utilizes the traditional nuclear facility approach. This means that for those analyzed events that have the potential to result in releases, equipment is credited for mitigating the consequences.

Questions were fielded by Mr. Martini about the differences between 235-F and KAMS. He stated that DOE has directed WSRC to conduct the analyses in support of the plans to extend the life of both facilities to meet future mission needs.

DOE Response to June 2003 Defense Nuclear Facilities Safety Board (DNFSB) Letter

Jerry Devitt introduced Kevin Hall and reminded the committee that Kevin's presence was in response to their request for more information as a result of a DNFSB letter that they discussed at the last meeting.

Mr. Hall stated that while the DOE response has not yet been approved and may change, his presentation was to give them the opportunity to hear the Department's approach to addressing the DNFSB concerns.

Mr. Hall stated that DOE agrees that new analyses for KAMS and 235-F are appropriate due to proposed mission changes that will extend the need for these facilities. He explained that WSRC had been directed to upgrade the analyses in April 2003 and the work is now ongoing. He said

new Fire Hazard Analyses would also be required for both facilities. They will also evaluate whether legacy Pu-238 in the 235-F facility should be removed at this time.

According to Mr. Hall, DOE does not agree that the KAMS ventilation system should be upgraded. He expressed a concern that such an action would require the expenditure of funds on a system that was not going to be relied upon during routine activities. Another area where DOE disagrees with the DNFSB is the need to remove inactive combustible cables in KAMS. He explained that while the removal of the cables was one way to address the condition, DOE has concluded that sealing the cables and establishing a fire barrier safely manages the risk without creating worker exposure to PCBs and other hazards.

He acknowledged that a second letter has been issued by the DNFSB in reference to electrical issues associated with 235-F and KAMS. Mr. Hall said that a response has not yet been drafted at this time.

Mr. Hall answered queries from several committee members about facility life span, costs, and risks. He said important information will be derived from the ongoing surveillance program of the 9975 containers and that this information will be used to maintain safe Pu storage.

Storage and Disposition of Environmental Management (EM) Owned Plutonium at SRS

Kevin Hall opened his second presentation with an explanation of the background for consolidation of EM Pu at one site. He said that the National Environmental Policy Act (NEPA) analysis had been previously conducted but emphasized that no decision had been made. He further stated that an amended Record of Decision (ROD) would be required if DOE determined that consolidation should take place.

He reminded the committee that shipments of material from Rocky Flats has been ongoing, but if Pu consolidation were to be approved, material from Hanford could also be shipped to SRS. If that were decided, Mr. Hall said that DSA proposed upgrades to 235-F and KAMS would provide the capacity for the storage of this material in either drums or 3013 racks.

He characterized that much of the Pu that is under consideration for consolidation as material that will not meet the specifications for the Mixed Oxide (MOX) facility. Mr. Hall emphasized that the decision to consolidate Pu at SRS had not been made. He said that national security issues as well as a defined exit path for the Pu would be part of the final policy decision.

Questions from the committee focused on the specifications for MOX fuel and potential exit strategies.

Lee Poe stated that he felt DOE was not using environmental impact statements (EISs) appropriately and said that the example given in this presentation was an example of using EISs for whatever purpose they wished in the last three years.

Public Comment

Mr. Devitt requested if the public or any committee member had any other comments at this time. Wade Waters stated that the recent guidance from the Assistant Secretary has affected the

SRS and requested interested parties to attend a meeting at 10:00 AM, Tuesday, August 19 at the Holiday Inn Express to discuss the issues. He said Jeff Allison or Charlie Anderson would be present at the Waste Management meeting at 5:00 PM, Tuesday, August 19 at the Aiken Federal Building. They have agreed to provide information relative to SRS implementation plans for meeting the guidance and to answer questions.

Lee Poe's requested the committee to discuss potential recommendations that would be forthcoming from the evening's presentation. As a result of committee discussions, additional information was requested, and work is to begin on draft motions.

With no other public comments, the meeting was adjourned at 6:55 PM.

For additional information or meeting handouts, call 1-800-249-8155.

Follow-Up Actions

1. NM committee requests a copy of the DOE response to the DNFSB Letter of June 2003. (Responsible Party: Kevin Hall)
2. NM committee requests a follow-up presentation be scheduled on 235-F. (Responsible Party: Sachiko McAlhany/David Burke)
3. Draft motions are to be developed based on the committee's views on the following topics:
 - a. Plans for Pu consolidation based on disposition paths with timelines
 - b. Equity issues in receipt of Pu
 - c. DOE's approach to the use of EISs (Responsible Party: Rick McLeod/Jerry Devitt)