



SRS Citizens Advisory Board

Nuclear Materials Committee Meeting

**Aiken Federal Building, Aiken, SC
April 25, 2005**

The SRS Citizens Advisory Board (CAB) Nuclear Materials Committee (NMC) met on Monday, April 25, 5:00 PM, at the Aiken Municipal Conference Center, Aiken, SC. The purpose of this meeting was to discuss the Old HB-Line Ventilation Project, the Savannah River Site Proposed Plutonium Vitrification Capability, the Status of NM Recommendations, and to hear public comment. Attendance was as follows:

CAB Members

- Jerry Devitt
- Karen Patterson
- Perry Holcomb
- Art Domby
- William Willoughby
Tracey Carroll
Joe Ortaldo

Stakeholders

Bill McDonell
W. Lee Poe
Dana Nickell
Russ Messick
Mike French

DOE/Contractors

Sachiko McAlhany, DOE
Nick Delaplane, DOE
Randall Ponik, DOE
John Dickenson, WSRC
Charles Nickell, WSRC
David Burke, WSRC
Rick Walters, WSRC
Robert Hottel, WSRC
Kevin Matthews, WSRC
Reginald Jackson, BSRI
Georgia Oakes, BSRI
Gary Feenstra, BSRI
Dan Wojtowicz, BSRI
Teresa Haas, WSRC
Lyddie Broussard, WSRC

- NM committee members

Note: William Lawrence and Jean Sulc are CAB members of the NMC, but were unable to attend this session.

Welcome and Introduction

Jerry Devitt, NMC Chair, called the meeting to order at 5:00 PM, and encouraged full public participation. He introduced Charles Nickell as the first speaker on the evening's agenda.

Old HB-Line Ventilation Project, Charles Nickell, WSRC

Charles Nickell began his presentation with the background and purpose of the Old HB-Line Ventilation Project. He said that in order to understand the project, it was important to recognize that there are two facilities known as HB-Line. He explained that the various HB-Line processing activities that the stakeholders have heard about in the last several years have taken place in the newest HB-Line facility, which is located on fifth and sixth level and sits on top of H-Canyon. He stated that there is an Old HB-Line facility located within H-Canyon proper on

third and fourth level. While the processing activities remain in the new HB-Line, some support equipment in Old HB-Line remains in use. According to Mr. Nickell, the ventilation system for the Old HB-Line is suspect and this project is needed to ensure the continued safe operations of the H Area Completion Project.

Mr. Nickell provided a technical overview of the various steps and components needed to achieve project completion. He said the project design calls for the fans to pull from the Old HB-Line HEPA filters into the canyon ventilation systems. He explained that under this project, a new hole is being cut that allows for the fans to exhaust out through the Warm Canyon wall. His explanation was supported by a short video, which provided the stakeholders a better understanding of the scope and complexity of the project. This was further demonstrated through numerous photos of the ventilation work in progress.

Mr. Nickell said that while there are several remaining tasks to completion, the project is currently under budget and on schedule. According to Mr. Nickell, this project is forecasted to be completed and fully operational by September 2006.

He fielded numerous questions from the stakeholders. When asked what area was being exhausted and why, Mr. Nickell replied that chemicals, gloveboxes, and support facilities on the third and fourth levels of Old HB-Line are used to support the new HB-Line operations on fifth and sixth level. He explained that the fourth level has tanks that are used, and waste is repackaged in rooms on third level. While the ventilation size had been adequate, he said some of the hangers had pulled away from the supports leaving the ventilation potentially suspect. He explained that this project is not an upgrade but rather a replacement that will support continued worker protection as well as environmental protection.

Additional questions were raised about the safety of the proposed action that would allow for the existing ventilation duct to be left in place. Jerry Devitt called for a close to the topic by saying that the committee will draft a specific stakeholder question on this issue as a follow-up action.

Savannah River Site Proposed Plutonium (Pu) Vitrification Capability, Sachiko McAlhany, DOE-SR

Sachiko McAlhany opened her presentation by acknowledging that while the information in her presentation was very preliminary, she was pleased to begin the discussions with interested stakeholders on DOE's potential plans for Pu disposition. She explained that while the Pu Vitrification Capability is only a proposed mission with no current approval to proceed, her purpose was to provide background information about the proposed project's phases, assumptions, and process. She cautioned the stakeholders to remember that this concept is in its very early stages, and any information provided was subject to change as future decisions are made.

Ms. McAlhany recapped the recent history of disposition plans for Pu and the cancellation of the Plutonium Immobilization Program (PIP), which left approximately 13 metric tons (MT) of Pu without a disposition path. She explained that a public law requires a disposition path for any Pu coming into South Carolina and that requirement remains despite the cancellation of the PIP. Ms.

McAlhany said that any disposition path selected must be completed in time to support the SR's End State of completing the SRS cleanup by 2025.

She acknowledged that while there may be a potential that some of the approximately 13 MT of Pu may be suitable as feed to the Mixed Oxide Fuel Facility, there would still remain a significant amount that will require another type of disposition path. Ms. McAlhany said that while extended storage is an option, it would only manage, but not reduce, the risk. She explained that it is more cost effective to disposition the material since estimates have shown that extended storage costs were similar to dispositioning. She said while there is a potential for DOE Environmental Management (EM) to assist other DOE Programs through a new disposition capability, it is premature to discuss such an option at this time.

Ms. McAlhany detailed the various aspects of pre-conceptual planning. When asked to explain the project's focus, she said the justification for the mission need is based upon what material is at SRS today. She said the Proposed Pu Vitrification Capability is still in the first stage and has not been approved by the Deputy Assistant Secretary. If approval to proceed is granted, conceptual design would commence and significant analysis work would be undertaken followed by final design and construction activities. This process would take several years before the final steps of project acceptance and operations occur, assuming the project start is approved.

Ms. McAlhany provided an overview of the proposed vitrification process and answered a wide variety of questions. She explained that both the ceramic and vitrification options had been considered good alternatives but it would be important that flexibility be maintained. According to Ms. McAlhany, any disposition option would need to be able to accommodate impurities and use technologies that had already been developed. When quizzed about project specifics, she stated that since it was very pre-conceptual, it was too premature to answer most of the stakeholders' technical questions. Ms. McAlhany reminded the committee that there are a number of other variables that would need to be addressed in addition to the design work. She cited the need for National Environmental Policy Act (NEPA) activity and an agreement between DOE EM and DOE Radioactive Waste (RW) for any material to be sent to a federal repository.

She concluded her presentation by reminding the stakeholders that due to the many variables, disposition capability decisions will be adjusted as more is learned. Much additional work is needed and flexibility will be maintained. Ms. McAlhany stated that alternatives will be considered to ensure that the proper dispositioning capability is ensured as long as it is needed.

Status of NM Recommendations, Jerry Devitt, NMC Chair and Karen Patterson, NMC Vice Chair

Jerry Devitt asked if there was any discussion on potential recommendations.

Lee Poe asked the committee to consider recommendations based on the two presentations made at the meeting. He specifically asked that consideration be given to the ventilation issue and that the CAB makes a recommendation to not take any Pu unless you have a disposition path. Jerry Devitt thanked him for his comments and stated that he would discuss Lee's suggestions with Karen Patterson.

During a discussion of existing recommendations, Ms. Patterson asked that the committee move Recommendation 206 from pending to open status. She also asked that Recommendations 176 and 184 be closed. Mr. Devitt agreed

Public Comment

Bill McDonnell stated that he would disagree with any motion that would prevent fissionable material from coming to SRS. He said in this day and age, he would prefer to have it at SRS where it can be handled in a secure way.

Mr. Devitt asked for any other public comment and with none, he then adjourned the meeting at 6:48 PM.

Status of NM Recommendations, Jerry Devitt, NMC Chair

Jerry Devitt asked if there was any discussion on potential recommendations. It was agreed that additional information would be needed before any new recommendations could be considered.

For additional information or meeting handouts, call 1-800-249-3155.

Follow-Up Actions

1. Provide response to: "Why are you certain leaving the duct unventilated and blanked off does not cause problems? How do you know it is safe?"
Requested by Jerry Devitt and Karen Patterson for Lee Poe (Responsible Party: Charles Nickell)