



SRS Citizen's Advisory Board

SRS Citizens Advisory Board Meeting Minutes

Savannah, Ga.
May 23-24, 2005

Monday, May 23, 2005, Attendance

SRS CAB Members

Meryl Alalof	Ranowul Jzar
Donna Antonucci	William Lawrence
Manuel Bettencourt	Wendell Lyon
Tracey Carroll	Jimmy Mackey
Leon Chavous	Joseph Ortaldo
Gerald Devitt	Karen Patterson
Arthur Domby	Barbara Paul
Mary Drye	Dorene Richardson
Perry Holcomb	Jean Sulc

Stakeholders

Gary Zimmerman
Bill Vogele
Mel Galin
Vikram Vyas

Regulators

Annie Godfrey, EPA
David Wilson, SCDHEC

Ex-Officio Members

Bill Spader, DOE
Shelly Sherritt, SCDHEC
Albert Frazier, GADNR

DOE/Contractors

Kevin Smith, DOE
Terry Spears, DOE
Helen Belencan, DOE
Gerri Flemming, DOE
Becky Craft, DOE
Randall Ponik, DOE
Nick Delaplane, DOE
Elmer Wilhite, DOE
Sonny Goldston, WSRC
Michael Graham, Bechtel
David Burke, WSRC
Jim Moore, WSRC
Joe Carter, WSRC
Lyddie Broussard, WSRC
Dawn Haygood, WSRC
Paul Sauerborn, WSRC

Waste Management Committee

Draft Salt Waste Determination

Terry Spears, DOE, referred to the draft Salt Waste Determination document which was prepared for Secretary of Energy approval in accordance with Section 3116 of the 2005 National Defense Authorization Act to provide a basis that certain waste derived from reprocessing in the tank farms can be treated and disposed of as low-level waste onsite. The residual waste addressed in the Draft Waste Determination will be Class C or better and will meet the performance objectives identified in Title 10, Code of Federal Regulations, Part 61 Subpart C.

The Salt Waste Determination document was written in late 2004 and early 2005. It was submitted to the Nuclear Regulatory Commission (NRC) for consultation (in accordance with Section 3116) on February 28, 2005, and was released by DOE for public comment on April 1, 2005. The public comment period was scheduled to end May 20, 2005, but an extension to May 31 has been approved and will be announced in the *Federal Register* during the week of May 23. DOE anticipates that the NRC will provide comments on the Draft Waste Determination by late May. The site plans to respond to these comments within 30 days. The current expected startup date for initial salt processing using the Deliquification, Dissolution and Adjustment (DDA)

process is January 25, 2006. In the meantime, the site continues to prepare the necessary facilities and processes. For example, the Saltstone Facility is being modified to accept DDA waste and the site is working to prepare DDA feed from tank 41.

Joe Ortaldo presented the draft motion regarding Draft Salt Waste Determination (see attachment). The motion requested that DOE-SR proceed with the planned interim technologies to ensure uninterrupted use of DWPF and to enhance risk reduction. It asked DOE SR to provide to the SRS CAB by July 26, 2005, more detailed information on the Tank 48 process strategy, including alternatives, and the potential impacts to DWPF and Saltstone and recommended that DOE-SR working with the South Carolina Department of Health and Environmental Control (SCDHEC), assure flexibility in operating the Saltstone Disposal Facility to accommodate disposal of between 3 million and 5 million curies. The motion also requested that DOE-SR provide an Independent Scientific Peer Review (ISPR) on both the Vault 4 Saltstone Performance Assessment (PA) special analysis and the PA revision and the DOE give the Citizens Advisory Board an updated tank-leak history and crack history by January of each year. Minor modifications were discussed. The CAB concluded that the NRC review of the Salt Waste Processing Facility (SWPF) would suffice for the requested ISPR and therefore, changed the motion to request the results of this review. The Board also modified the motion to request the tank leak history by July 2005 and then annually by April thereafter. Several other minor modifications were provided to the background section of the motion.

Salt Waste Processing Facility Hazards Confinement

Terry Spears indicated the purpose of the presentation (see attachment) was to acquaint the CAB with the hazards confinement design approach taken for the SWPF and to familiarize the CAB with the issues raised by the Defense Nuclear Facilities Safety Board (DNFSB) that relate to the SWPF hazards confinement approach. Mr. Spears reviewed the SWPF process explaining each process function and commenting that SWPF is essential to the successful cleanup of the tank waste system. He reviewed with the CAB the SWPF structure housing the processing functions which will be comprised of thick, reinforced concrete walls. No high temperatures or high pressure is required for the processing functions. The support functions and the Alpha Finishing Facility surround the central processing area and are housed in steel and concrete structures.

DOE accident analysis and design guidance documents and corresponding standards were reviewed. The SWPF analysis and design meet all applicable DOE standards. The worse case accident scenario was identified as an earthquake with the entire process inventory spilling out accompanied by fire. With this scenario, the unmitigated consequence to the offsite public was .05 rem and 35 rem to the onsite worker. Safety significant passive primary and secondary confinement barriers were identified to prevent/mitigate this consequence, as required by DOE standards. Also, as prescribed by DOE standards, the Safety significant barriers were designed to meet Performance Category (PC) 2 structural criteria. Several additional defense-in-depth barriers/controls were also discussed such as the Alpha Finishing Facility stainless steel lined dikes, the central processing area process cell stainless steel lines, fire suppression systems, and leak detection.

A DNFSB letter of August 27, 2004, identified issues related to the DOE standards for hazard/accident analysis and for structural design to protect controls needed to prevent/mitigate

accident consequences. The DNFSB expressed in this letter that the SWPF should be designed as PC-3 rather than PC-2. DNFSB Recommendation 2004-2 further suggests that Hazard Category 2 nuclear facilities utilize a safety-related active ventilation system for confinement of hazardous materials. Both of these DNFSB documents identify issues that may affect the SWPF design and may result in cost and schedule impacts to the project, as well as additional significant life cycle cost impacts.

The potential impacts to SWPF of implementing the DNFSB issues are a schedule delay of 16 months and an estimated cost of up to \$170 million. The delay of startup would risk a Defense Waste Processing Facility (DWPF) shutdown by 2009 due to lack of tank space and increase the risk of waste storage and would entail added risk and cost of continued management of waste in tanks for an extended period.

DOE says that the SWPF hazard/accident analysis and design is conservative and complies with the DOE directives. Consequently, the design of the SWPF is continuing and the project team is working toward submittal of a request for Critical Decision 2 (approval of performance baseline) for the project. Meanwhile, DOE has commissioned two ongoing independent peer reviews, one on the hazard/accident analysis and one on the seismic design to evaluate and validate analytical results and design decisions to date. DOE will brief DNFSB on the results of its independent reviews and respond separately to the DNFSB letter and Recommendation 2004-2. DOE would conduct back-fit analysis of SWPF, as needed, if the DOE standards are revised.

Joe Ortaldo presented the committee's draft motion that asked DOE-SR to expeditiously resolve the open issues related to the SWPF confinement system based on technical merit, risk impact to the overall SRS waste management system, and cost benefit analysis of various options. The motion also requested an estimate of the risks of postponing the treatment of high-level wastes and closing HLW tanks in a HLW system operating with pre-existing seismic criteria and 50-year old tanks and infrastructure and asked DOE to review the open issues related to the SWPF confinement system with the Citizens Advisory Board's Waste Management Committee at the committee's June meeting.

Nuclear Materials Committee

Jerry Devitt, Nuclear Materials Committee (NMC) Chair, opened the meeting by stating that DOE had recently presented information about proposed plutonium disposition plans. Based on what the NMC has learned, he said the committee has drafted two recommendations (see attachments) on the topic. He asked the motion managers to lead the discussion on these issues.

As an introduction to the draft recommendation on "Plutonium Vitrification Facility at SRS," Art Dombey explained that over the years DOE has made a series of decisions involving the storage and disposition of surplus plutonium (Pu) material. He said the committee has recently learned that a new vitrification process at SRS is under consideration. Mr. Dombey stated that while there is no current approval to proceed with this concept, it is the committee's feeling that it may be a viable disposition path if key issues are resolved. He said the NMC supports the rapid disposition of stored Pu, but is skeptical about the timing of the Pu vitrification facility and believes that it should be sized adequately for all potential feed. Another issue according to Mr. Dombey is that the plans called for this process to be coupled with the Defense Waste Processing

Facility (DWPF). While the NMC agrees with the approach, it wants assurances that the DWPF operational schedule will not be adversely affected by the new process. He said the committee would also like alternatives evaluated for the vitrification process limitation requiring co-disposal with cesium to meet the Yucca Mountain standard. With only minor editorial changes suggested, it was agreed that the draft recommendation should be formally presented at the Board meeting.

Karen Patterson opened the discussion of the “Plutonium Disposition Options” draft recommendation. She explained that while the CAB had previously made plutonium (Pu) disposition recommendations in the past, this draft motion specifically addresses new Pu material shipped to SRS without a viable and demonstrated disposition path. Ms. Patterson said the focus of this recommendation is to ensure that DOE knows how it is going to process the Pu before accepting new Pu receipts at SRS. She said that as part of this recommendation, the NMC believes DOE should expedite the development of a complete, well-considered plan for the disposition of all excess Pu to preclude unnecessary extended storage at SRS. To avoid disposition delays, the NMC believes DOE should consider using H Area facilities rather than be solely dependent on the proposed Pu Vitrification Facility.

Ms. Patterson fielded numerous questions about the draft recommendation. Of significant interest to the stakeholders was how to properly define the Pu material to be restricted. Some concern was expressed about ensuring the final recommendation did not eliminate receipts of laboratory samples or small quantities of Pu that may help other DOE sites meet closure goals. The stakeholders also discussed how to determine what would constitute a viable and demonstrated disposition process to the satisfaction of the CAB. Ms. Patterson agreed to rework portions of the draft recommendation prior to presenting it to the full Board.

Facilities Disposition & Site Remediation Committee

Helen Belencan, DOE, presented an update on F-Canyon Decommissioning (see attachment) and identified several dates that the CAB has been briefed on various D&D activities. She stated that the purpose of this briefing was to discuss the approach and plans for F-Canyon Decommissioning and receive input from the CAB. Ms. Belencan noted that F-Canyon was built in the early 1950’s and processing began in November 1954. The canyon was used to chemically separate Plutonium-239. It is 835 ft. in length, 122 ft. in width and 52 ft. high and has four levels, two sides (warm and hot) and is approximately 175,000 sq. ft. in size.

The original “F-B Line” was housed in Levels 3 and 4 of F-Canyon, however a new F-B Line was constructed on Levels 5 and 6 between 1957-1959. It operated to support defense needs from 1959-1990 and was placed in standby at end of Cold War. It was restarted in 1995 to stabilize legacy nuclear materials.

Ms. Belencan stated that SRS looked at the Hanford site’s five canyon buildings, which conducted their evaluation according to the CERCLA remedial action process (Feasibility Study issued in 2001, Final Proposed Plan issued in 2004 and Record of Decision issued in 2005. The alternatives that were looked at for the Hanford canyons were:

Alternative 0: No Action

Alternative 1: Full Removal and Disposal

Alternative 2: Decontaminate and leave in place (considered not protective and so not further evaluated)

Alternative 3: Entombment with internal waste disposal

Alternative 4: Entombment with internal/external waste disposal

Alternative 5: Close in place – standing structure (considered not viable and so not further evaluated)

Alternative 6: Close in place – collapsed structure

Ms. Belencan stated that in addition to the alternatives above, that the DOE Office of Inspector General (IG) provided a report that concluded preliminary studies suggest that the Hanford canyons could be used to dispose of mixed and low-level waste. The IG concluded that the DOE did not adequately consider using 221-U canyon as a waste disposal site, and the economic benefits were not thoroughly investigated

Therefore the IG recommended that Hanford was to perform a cost study considering all waste types as viable candidates for disposal in a canyon and Savannah River and Idaho should consider the viability of disposing of waste in canyons and similar facilities, based on the results of the Hanford study.

Ms. Belencan turned the Board member's attention back to the SRS F-Canyon deactivation path forward, discussing the F-Canyon deactivation end point review, and environmental characterization. The F-Canyon deactivation plan was based on an indefinite delay between deactivation and decommissioning, and in November 2004, site D&D, with support from SGCP and FCC, evaluated deactivation end points relative to a change in decommissioning timing from "indefinite" to "near term" ranging from 0 to 15 years. The evaluation focused on safety (power, criticality, environmental conditions, fire protection, and building envelope) and efficiency (cranes, elevators, and environment). Upon review of the evaluation, minor changes were identified in four areas:

- Environmental conditions – S&M program was modified to include monitoring for indications of mold growth
- Building envelope – modified means of sealing railroad access doors
- Cranes – modified to block the trucks and so reduce damage
- Elevators – lay up plan modified

In addition, radiological surveys inside the hot and warm canyon will identify hot spots for decommissioning follow-up, if necessary.

Ms. Belencan summarized by stating that the approach to decommissioning F-canyon will follow the framework established by the following:

- Joint EPA and DOE memorandum of May 1995, which establishes the approach agreed upon by the EPA and the DOE for decommissioning surplus DOE facilities consistent with the requirements of the CERCLA removal action process while retaining sufficient flexibility to tailor activities to meet specific site needs and achieve risk reduction and environmental restoration expeditiously
- DOE G 430.1-4, "Decommissioning Implementation Guide"
- Procedure manual 1C – Facility Disposition Manual

- Formal process with involvement of EPA, SCDHEC, memorandum of agreement for achieving an accelerated cleanup vision at the Savannah River Site, May 22, 2003

Preliminary planning will begin this year with the development of initial documentation, and decommissioning will occur between 2009 and 2015.

Mary Drye presented the committee's draft motion regarding F Canyon Decommissioning (see attachment). The motion requested that DOE consider conducting periodic informational briefings and/or public workshops (at least one per year prior to the 2009 decommissioning activity start date) on the different aspects of the F-Canyon Complex decommissioning process. As an initial starting point, the briefings or workshops should address the following:

- How residual plutonium is quantified, how much is found, and how a decision will be made to leave it there or remove part of it.
- What level of source terms lie underneath F-Canyon Complex or in the near vicinity of its perimeter, how will DOE adequately characterize the contamination, and how will it be factored into the final end state decision for the canyon.
- Explain to stakeholders what the EE/CA process is, how it applies to CERCLA non-time critical removal actions, how it differs from other CERCLA actions, and why it was selected for the F-Canyon Complex instead of a possibly more stringent approach.

Jimmy Mackey stated that to quantify the residual Pu in F-Canyon would be difficult. Mr. Holcomb responded to say that was exactly why we are asking for the information. Karen Patterson asked how the perimeter contamination would be addressed. Ms. Belencan stated it would be addressed as a separate groundwater cleanup program. Annie Godfrey from EPA Region-4 stated that EPA looks at the scope of each project and the extent of analysis that is required (EE/CA, etc.).

Strategic & Legacy Management Committee

William Lawrence, Chair, welcomed those in attendance. Mr. Lawrence referred to the Center for Disease Control's (CDC) draft document that is now available for public comment. It is the Risk-Based Screening of Radionuclide Releases from the SRS. The CDC will be invited to the July Board meeting to give a review of the document. Joe Ortaldo, a member of the CDC Citizens Board, mentioned that there will be a meeting on August 16 (delayed to September) in Augusta regarding the document. Mr. Ortaldo indicated that the results of the report indicate the health effects are minimal.

Mr. Lawrence presented the following recommendations as part of the committee's draft motion:

- DOE apply the risk-based approach proposed by National Academies of Science to determine the acceptable end states for all buildings, waste management facilities, reactors and active and inactive waste units containing radionuclides, heavy metals, or organic contaminants (e.g. tritium, etc.).
- DOE use performance assessments to determine risks and provide results in the End State Vision.
- DOE use a risk informed application to determine the end state for Pu238 waste.
- DOE release decision documents to the public at the same time they are released for external agency review.
- DOE evaluate the impact to SRS if Yucca Mountain doesn't open.

- Provide estimates of risks to SRS stakeholders if vitrified-HLW is left permanently at SRS.
- DOE-HQ obtain Congressional Authorization to provide perpetual federal ownership of and responsibility for SRS.
- DOE-HQ obtain Congressional Authorization to formally/legally name SRS as a National Environmental Research Park and discuss the types of current and end state research in the ESV.

Public Comments

No public comments were received other than Bill Vogele's comment that the Board was operating very efficiently.

Tuesday, May 24, 2005, Attendance

SRS CAB Members

Meryl Alalof
Donna Antonucci
Manuel Bettencourt
Tracey Carroll
Leon Chavous
Gerald Devitt
Arthur Domby
Mary Drye
Cassandra Henry
Perry Holcomb
Ranowul Jzar

Stakeholders

Joe Whetstone
Lou Zeller
Gary Zimmerman
Wade Waters
Janet Wedlock
Carol Connell
Becky Dawson
Nancy Ann Ciechanski
Kenneth Sajwan
Vikram Vyas
Sara Barczak
Pete Likemas

William Lawrence
Wendell Lyon
Jimmy Mackey
Danielle Mackie
Joseph Ortaldo
Karen Patterson
Barbara Paul
Dorene Richardson
Jean Sulc
Ranowul Jzar
Carolyne Williams
Gloria Williams Way
Bill Willoughby

Regulators

Annie Godfrey, EPA
David Wilson, SCDHEC
Kim Newell, SCDHEC

Ex-Officio Members

Bill Spader, DOE
Shelly Sherritt, SCDHEC
Albert Frazier, GADNR

DOE/Contractors

Jeff Allison, DOE
Rich Arkin, DOE
Kevin Smith, DOE
Gerri Flemming, DOE
Becky Craft, DOE
Helen Belencan
Randall Ponik, DOE
Brian Hennessey, DOE
Nick Delaplane, DOE
Tiajuana Cochnauer, USFS
David Burke, WSRC
John Dickenson, WSRC
Mary Flora, WSRC
Jim Moore, WSRC
Joe Carter, WSRC
Lyddie Broussard, WSRC
Dawn Haygood, WSRC
Paul Sauerborn, WSRC
Sonny Goldston, WSRC

SRS CAB members Bill Lawless and Bob Meisenheimer were unable to attend. The meeting opened with Bill Spader, DOE, serving as Designated Federal Official. Mike Schoener served as facilitator and Rick McLeod, Board Technical Advisor was present as well. The meeting was open to the public and posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

Approval of the Minutes

The meeting minutes of March 28-29, 2005, were approved with no changes.

Agency Update

Jean Sulc introduced Al Frazier of the Georgia Department of Natural Resources as a new Ex-Officio Member of the CAB.

Bill Spader, DOE, introduced Jeff Allison, DOE Site Manager, who thanked the Board for their work. He announced that Charlie Anderson had been appointed Principal Deputy Assistant Secretary for Environmental Management. He also noted that the President had nominated Jim Rispoli for the position of Assistant Secretary for EM. Paul Golan moved to the Office of Civilian Radioactive Waste Management and Inez Triay was named the Chief Operating Officer for EM. He noted recent DOE-Headquarters personnel visits to SRS and their recognition of the

importance of Savannah River and its unique capabilities. Mr. Spader welcomed Al Frazier to the CAB. He also noted the recent Site Specific Advisory Board Chairs meeting and all he learned at the meeting. Mr. Spader discussed the status of the End State Vision (ESV) and also noted that Appendix E had been approved. He also provided a status of the Transuranic Waste program. Accelerated shipments commenced on April 25, and there are currently six shipments per week.

Annie Godfrey, EPA, noted Dawn Taylor may be back for the July CAB meeting. She stated EPA is working hard on area closure and keeping field work going. She noted efforts to coordinate D&D with the CERCLA process and mentioned a meeting at the site the previous week to get information regarding the LLW management process. Ms. Godfrey will be leaving for a four month detail in the Water Division.

Shelly Sherritt noted SCDHEC is continuing to prepare for upcoming permits for the SWPF and is in contact with the NRC. She stated SCDHEC expects to have comments by the end of month. SCDHEC reviewed the draft waste determination and submitted comments on May 12. She stated SCDHEC's function is to touch base with other agencies and monitor progress. Regarding transuranic waste, Ms. Sherritt noted SRS is expecting to receive an additional 100 cubic meters of waste from the Mound, but SCDHEC expects to see more of the SR waste going out than Mound coming in. An agreement was reached for four cubic meters of SR waste to be shipped to WIPP for every one cubic meter coming from Mound. The Mound waste must also be packaged and ready to ship to WIPP. Ms. Sherritt also commented on the cleanup agreement with SRS noting that SCDHEC has approved the recent revision to outyears scope of work in Appendix E.

Al Frazier provided information about his background; the decentralization of GADNR and his move to the new district office in Augusta.

Public Comments

Joe Whetstone, Bluffton, S.C.

"There is a long-standing practice in the design, construction, and operation of nuclear facilities to build-in and maintain structures, systems and components that contain or confine radioactive materials." This statement is from the background portion of the SWPF Confinement System motion that is on today's CAB agenda. If this statement is true, Mr. Whetstone asks then why does the drinking water that is taken from the Savannah River and supplied to customers by the Beaufort Jasper Water and Sewer Authority contain tritium? If this is a true statement, then why do SCDHEC, GADNR, EPA and DOE publish and distribute a flyer warning that some fish in part of the Savannah River may contain radioactive materials such as cesium and strontium? Given the environmental degradation caused by the activity at the nuclear facilities located at the Savannah River Site, making such a statement reduces the credibility of the CAB.

Mr. Whetstone also stated that CAB members should not continue to perpetuate the ridiculous assertion from section 3116 of the Defense Authorization Act for Fiscal Year 2005 that the phrase "high level waste" does not apply to certain waste left in South Carolina and Idaho. If the same waste were in any other State it would be called "high level waste."

Chairs Update

Jean Sulc read a letter of recognition from Secretary Bodman to the Board and asked that DOE display the letter. Ms. Sulc asked for approval for the SRS CAB to sign the letter to Secretary Bodman regarding public involvement that was developed during the SSAB Chairs meeting. The Board unanimously approved. Ms. Sulc further discussed highlights from the SSAB Chairs meeting, noting discussions regarding a National Dialogue and the fact that Frank Marcinowski, DAS for Logistics & Waste Disposition had attended and presented during the meeting. Ms. Sulc noted the SRS CAB would be updating its success stories. She also thanked SRS for its support of the SSAB Chairs meeting and provided a brief summary of the tour, which gave a palpable sense of the progress at the site, she said. Ms. Sulc also noted the Executive Committee had determined a process retreat should be held in the fall and more details would be forthcoming. She also noted that Jimmy Mackey had agreed to be an informal liaison for environmental justice issues.

Facilitator Update

Mike Schoener presented the Recommendation Summary Report (see attached). Seven recommendations are pending, 26 open and 177 closed.

Waste Management Committee

Joe Ortaldo presented the draft motion regarding Draft Salt Waste Determination (see attachment). He noted this was being done to ensure we can close the waste tanks on a reasonable schedule. Most of the volume of HLW is salt and 3116 describes a way to start operation of salt processing. The motion asked DOE to proceed with the planned interim technologies to ensure uninterrupted use of DWPF and to enhance risk reduction. It also asked DOE-SR to provide more detailed information on the Tank 48 process strategy, including alternatives and the potential impacts to DWPF and Saltstone. The motion addressed flexibility in operating the Saltstone Disposal Facility; independent scientific peer review; and requested an updated tank-leak history on an annual basis. Jimmy Mackey moved the Board adopt the motion and Wendell Lyon seconded. The motion was approved unanimously by a vote of 22 members in favor.

Joe Ortaldo presented the committee's second draft motion regarding SWPF Confinement System (see attachment). Based on concern expressed by DNFSB to DOE regarding standards governing the confinement approach used for SWPF design, the CAB believes that changing the standards would likely result in delays up to 16 months and increased cost. The CAB is interested in the schedule being accelerated, not delayed. The motion recommended that DOE work with DNFSB to resolve the issues.

Additionally, concerned that the delay may not be based on a risk-informed decision process, they ask that DOE provide an estimate of the risks of postponing HLW treatment and closing tanks using the existing seismic criteria and they asked DOE to review open issues related to the confinement system at the June Waste Management Committee meeting. Following one modification, Mary Drye moved the Board adopt the motion and Bill Willoughby seconded. The motion was approved unanimously by a vote of 22 members in favor.

Nuclear Materials Committee

Art Domby presented the draft motion regarding a Proposed Plutonium Vitrification Facility at SRS (see attachment). Skeptical of the plutonium vitrification facility schedule, the motion

recommended that DOE aggressively pursue funding to complete design and construction of the facility by 2010 or otherwise ensure that the DWPF's schedule will not be interrupted. It also asked DOE to consider all potential plutonium material that may be processed at SRS when sizing the vitrification facility and asked DOE to investigate options other than co-disposal with Cesium-137 from high level waste. Jimmy Mackey moved the Board adopt the motion and Dorene Richardson seconded. The motion was approved unanimously by a vote of 22 members in favor.

Karen Patterson presented the committee's second motion regarding Plutonium Disposition Options (see attachment). The CAB is concerned that SRS may receive additional plutonium before there is a viable and demonstrated disposition path available. The motion recommended that no additional shipments of excess weapons grade plutonium be sent to SRS until five percent of the existing quantity has been dispositioned successfully. It also recommended that other options, such as using H-Area, be considered for processing excess plutonium and recommended that DOE not rely solely on the Plutonium Vitrification Facility. Following a great deal of discussion regarding the definition of "weapons grade material," Jerry Devitt moved the Board adopt the motion and Dorene Richardson seconded. The motion passed by a vote of 21 members in favor and one opposed. A minority report was submitted by William Willoughby that noted his concern that limiting the recommendation to "DOE excess weapons grade plutonium" is too narrow. He requested that DOE send no significant shipments of DOE excess plutonium to SRS for long-term storage until the disposition path for this material has been determined and proven.

Public Comments

Wade Waters, Savannah, Ga.

Mr. Waters welcomed the CAB to Savannah, Ga. and the greater Pooler area. He noted he had requested that his application be submitted for consideration during the upcoming 2006 membership elections and discussed his prior service on the CAB.

Lou Zeller, Blue Ridge Environmental Defense League

Written comments attached.

Joe Whetstone, Bluffton, S.C.

Mr. Whetstone stated that Tom Clements of Green Peace International would like to share some correspondence he has recently had with Abel Lopez, Director of the FOIA/Privacy Act Group at DOE and Paul Golan of DOE. One of the items that came out of Tom Clements' correspondence is a report titled Savannah River Site Storage of Surplus Plutonium Study: 2004 Update. Although Mr. Golan indicates that DOE is revising some of the assumptions in this report, Mr. Clements thought the report might be of interest to the CAB. The report references quantities of plutonium at various DOE sites around the nation along with shipment dates from these sites to SRS. Mr. Whetstone provided copies of Mr. Clements' correspondence.

Mr. Clements also sent a list of a few of the findings from the audit report released this month by DOE Inspector General Gregory Friedman. The report is an audit of the "National Nuclear Security Administration's Pit Disassembly and Conversion Facility." A few items of note from the audit:

- The overall schedule for the completion of the Conversion Facility may slip as much as four years from FY 2009 to FY 2013.
- NNSA's costs for the Conversion Facility Project will likely increase substantially beyond the \$1.7 billion reported to Congress in 2002.
- NNSA has not determined what method it will use to dispose of the waste generated by the Conversion and MOX facilities and had not provided the ultimate cost of the disposal in its estimate to Congress as required.

Mr. Whetstone stated that Mr. Clements would like to make the following suggestions to the SRS CAB:

Although the CAB may feel the Conversion and MOX facilities are an NNSA issue and the CAB should not get involved, dealing with the waste generated by these facilities will most likely get dumped on EM. Therefore the SRS CAB should get involved. Another point, the CAB should raise the possibility of vitrifying ALL surplus plutonium with DOE in the event the MOX program fails or stops for some reason after it is started. Mr. Whetstone provided the following link to the DOE/IG report: <http://www.ig.doe.gov/pdf/ig-0688.pdf>.

Pete Likemas, Savannah, Ga.

Mr. Likemas thanked the board members for their time and efforts on behalf of the Chatham County Commission. He stated that it is incumbent upon the board to look into information and provide correct information if needed.

Facility Disposition & Site Remediation Committee

Perry Holcomb presented a draft motion regarding the decommissioning of the F-Canyon Complex (see attachment). Acknowledging that it is very early in the F-Canyon Complex decommissioning process, the motion requested that DOE consider conducting periodic informational briefings and/or public workshops to address various aspects of the decommissioning process and include the following:

- 1) How residual plutonium is quantified? How much is found? How will a decision be made on what to do with it?
- 2) What source term is under or near F-Canyon? How will it be characterized? How will it be factored into the final end state decision for the canyon?
- 3) What is the EE/CA and how it applies to CERCLA non-time critical removal actions?

Jimmy Mackey moved the Board adopt the motion and Leon Chavous seconded. The motion passed unanimously with 22 members in favor.

Area Completion Implementation

Mary Flora, WSRC, provided a presentation on Area Completion Implementation at SRS (see attachment). Area Completion is a systematic approach to completing cleanup work at SRS, area-by-area, integrating D&D and Soil and Groundwater scope. The Memorandum of Agreement for Achieving Accelerated Cleanup Vision was signed in 2003 between DOE, SCDHEC and EPA. It endorsed an area-by-area approach to cleanup and recognizes an integrated cleanup. Historically, an operable unit process was utilized. One of the advantages of

area completion is that larger groupings of waste units are addressed and provide for a comprehensive area cleanup with one end state. The area completion process provides for an integrated approach; economies of scale; and better integration of Soil & Groundwater and D&D activities.

Ms. Flora provided a pictorial to describe the area completion strategy. She discussed who is working the details noting the members of the Area Completion Executive Board; the Management Core Team; the Area Completion Team; Design Teams; and Area Project Core Teams.

Ms. Flora discussed Appendix E, an appendix to the SRS Federal Facility Agreement that contains Soil & Groundwater lifecycle cleanup milestones from 2006 through 2025. The appendix is updated annually and approved by the SCDHEC and EPA. It demonstrates the agencies' long term commitment to cleaning up waste sites, surface waters and groundwater. The FY05 Appendix E defines each of the waste units that are included in each of the 14 area completions. It also includes some D&D facility remnants for M and T Areas and is based on a new generic completion schedule. It was approved by SCDHEC and EPA in April 2005. T Area is the first SRS Area Completion in 2006. The SRS Area Completion Plan levels out the work. Ms. Flora concluded by noting that DOE, EPA and SCDHEC are well positioned to achieve further efficiencies and complete SRS cleanup by 2025.

Board members questioned how the area completion strategy related to watersheds at the site and inquired what is used to determine the cleanup priority. Are the watersheds included in the schedule or is that an independent process? Ms. Flora responded that is an independent process, referred to as Integrator Operable Units. When asked if Carolina Bays are included in Appendix E, Ms. Flora responded no, that what is in Appendix E are those units that have a known or expected release to the environment.

Strategic & Legacy Management Committee

William Lawrence announced that Meryl Alalof and Jimmy Mackey will vice chair the committee. He also announced that Recommendation 208 was being moved from pending to open. He commented that the CDC Dose Reconstruction Report is available on their website and comments will be accepted by July 2.

Meryl Alalof presented the committee's draft motion regarding the End State Vision (see attachment).

The motion endorses the ESV document and the ESV, but points out while how the Site gets to an end may change, the end states should be known and should not drastically change over time. The motion provided a list of recommendations in an effort to strengthen the ESV process, which include:

- DOE apply the risk-informed approach proposed by NAS to determine the acceptable end states for all buildings, waste management facilities, reactors and active and inactive waste units containing radionuclides, heavy metals, or organic contaminants.
- DOE use a risk-informed application to determine the end state for Pu238 waste.
- DOE release decision documents to the public at the same time they are released for external agency review.

- DOE evaluate the impact to SRS end states and risk to stakeholders if Yucca Mountain doesn't open and consider alternate plans should the repository not open.
- DOE-HQ identify necessary actions to provide perpetual federal ownership of and responsibility for SRS.
- DOE-HQ identify necessary actions to formally/legally name SRS as a National Environmental Research Park and discuss the types of current and end state research in the ESV.

Several modification were made, including separately, the Board requested that DOE-HQ identify and pursue Congressional Authorization to legitimize perpetual federal ownership of SRS and the identification of SRS as a National Environmental Research Park. They also asked DOE to describe the process for using performance assessments to determine risks and provide results to the SRS CAB. A progress report was requested by September 27, 2005.

Jimmy Mackey moved the Board adopt the motion and Jean Sulc seconded. The motion passed unanimously with 23 members in favor.

SRS Artifacts Storage & Long Term Records Management

Nick Delaplane provided a status of the actions resulting from CAB Recommendation 208 and the DOE's manager's reply (see attachment). DOE is working to have a full time curator by June 2005 and a Cold War Historian is already under contract. DOE continues to identify, catalog and move documents to Building 742-A in response to the Board recommendation to relocate more environmentally susceptible documents to a climate controlled facility. DOE is evaluating options to provide a conditioned storage and curation capability. Mr. Delaplane reported that Legacy Management anticipates being able to brief the CAB in the fall of 2005 with the benefit of lessons learned from the DOE closure sites. DOE-SR will continue to comply with all applicable records management policies, as we work to cleanup completion in 2025. Mr. Delaplane provided the SRS web address for related information. The web site is:

http://sro.srs.gov/hist_prsvn/hp_main.html.

Currently information is being placed on the web site. A team is being formed to select items of the most interest for display and determining how to make the website user-friendly. Mr. Delaplane reviewed the integrated historical preservation process for the program indicating there were three areas: deactivation and decommissioning, design change/ modernization and significant maintenance work. The steps in each area were reviewed. Mr. Delaplane had a copy of the actual schedule in the handout that identified the project list and activities.

Public Comments

Gary Zimmerman stated he wants a visualization of quantity and noted as an example that the Exxon Valdez spilled 11 million gallons and contained 50 million gallons. He compared this to the quantities of high level waste the Board discusses and commented that the waste is about the size of a tanker or ship and while, maybe not Lake Erie, it's not a pond either.

Handouts

SRS CAB May 23-24, 2005 Agenda

Draft Salt Waste Determination, Working Draft, Joe Ortaldo, CAB
Salt Waste Processing Facility Hazard Confinement System, Terry Spears, DOE
SWPF Confinement System, Working Draft, Joe Ortaldo, CAB
Proposed Plutonium Vitrification Facility at SRS, Working Draft, Art Domby, CAB
Plutonium Disposition Options, Working Draft, Karen Patterson, CAB
F-Canyon Decommissioning, Helen Belencan, DOE
F-Canyon Complex Decommissioning, Working Draft, Perry Holcomb, CAB
End State Vision Document, Working Draft, Meryl Alalof, CAB
SRS Gold Metrics
Highlights, Chairs Meeting, dated May 17, 2005, Jean Sulc, CAB
SRS CAB Recommendation Summary
Draft Salt Waste Determination, Final Draft, Joe Ortaldo, CAB
SWPF Confinement System, Final Draft, Joe Ortaldo, CAB
Proposed Plutonium Vitrification Facility at SRS, Final Draft, Art Domby, CAB
Plutonium Disposition Options, Final Draft, Karen Patterson, CAB
F-Canyon Complex Decommissioning, Final Draft, Perry Holcomb, CAB
Area Completion Implementation, Mary Flora, WSRC
End State Vision Document, Final Draft, Meryl Alalof, CAB
SRS Artifacts Storage & Long Term Records Management, Nick Delaplane, DOE
Recommendation 208- SRS Artifacts Storage & Long Term Records Management, William Lawrence, CAB