



SRS Citizen's Advisory Board

SRS Citizens Advisory Board Meeting Minutes

July 26-27, 2004

**Newberry Hall
Aiken, S.C.**

Monday, July 26, 2004, Attendance

SRS CAB Members

Meryl Alalof
Donna Antonucci
Leon Chavous
Gerald Devitt
Mary Drye
Mel Galin
Cassandra Henry
Perry Holcomb
Bill Lawless

William Lawrence
Wendell Lyon
Karen Patterson
Murray Riley
Jean Sulc
Bill Vogeles
Bill Willoughby

Stakeholders

Russ Messick
John Strack
Barbara Strack
Lee Poe
Mike French
Don Orth
Bill McDonell
Leslie Miner
Glynn Carroll
Bobbie Paul
Chuck Hill
Chuck Jennings
Michael Berg
David Adcock
Todd Crawford
Walt Joseph

Regulators

Chuck Gorman, SCDHEC
Jim Barksdale, EPA
Don Siron, SCDHEC

Ex-Officio Members

Bill Spader, DOE
Shelley Sherritt, SCDHEC
Dawn Taylor, EPA

DOE/Contractors

Jim Buice, DOE
Helen Belencan, DOE
Becky Craft, DOE
Gerri Flemming, DOE
Kevin Smith, DOE
Alice Doswell, DOE
Steve Baker, DOE
deLisa Bratcher, DOE
George Mishra, DOE
Doug Hintze, DOE
George Klipa, DOE
Terrel Spears, DOE
Ron Malanowski, WSRC
Dave Freeman, WSRC
Teresa Haas, WSRC
Sonny Goldston, WSRC
Joe Carter, WSRC
Lyddie Broussard, WSRC
Dawn Haygood, WSRC
Paul Sauerborn, WSRC
Kelly Way, WSRC
Tiajuana Cocknauer, USFS-SR
Pete Fledderman, WSRC

Facilities Disposition & Site Remediation Committee Report

Perry Holcomb, Facilities Disposition & Site Remediation Committee Chair, opened the meeting and provided introductory remarks.

D&D Response to Recommendation #192 and Project Update

Helen Belencan, DOE, provided a refresher of CAB briefings to date and the Decontamination and Decommissioning (D&D) process. Five presentations have been given at CAB, Combined CAB, and Facility Disposition and Site Remediation Committee meetings. The first presentation was made on May 20, 2003. The D&D process started with a DOE/EPA joint memorandum in May of 1995, which establishes the approach agreed upon by both parties for decommissioning surplus DOE facilities consistent with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The decommissioning framework is found in the Decommissioning Implementation Guide (DOE G 430.1-4), SRS site procedure manual 1C (Facility Disposition Manual), and a formal process with involvement of EPA, SCDHEC and the public.

The process calls for a graded approach to public participation based on complexity of the action, and consists of four models: The Engineering Evaluation and Cost Analysis and the Streamlined models are the highest complexity models requiring a 30 day public review before proceeding. The Integrated Sampling, and Simple models require that the CAB is informed of the action plans.

Ms. Belencan stated the purpose of this presentation was three fold:

1. To address CAB concerns via recommendation #192 (prioritizing D&D activities)
2. To update the CAB on the most recent D&D accomplishments
3. To identify contract changes in D&D work scope

Ms. Belencan stated that in Recommendation #192, the first recommendation stated "DOE-HQ and DOE-SR should closely review its D&D prioritization policy/strategy. Again, the D&D focus should be on risk mitigation and reduction and not merely on reducing the site footprint via D&D of select, still viable structures." Ms. Belencan responded to that by stating the DOE is driven by area closure and backed by risk elimination and cost benefit, supported by opportunity and actual availability of the facility and the resources to perform the work. Priorities reassessment are ongoing.

The second part of recommendation #192 states that "by July 27, 2004, DOE-SR provide the CAB and the general public additional details on its D&D prioritization activities. Specifically, life cycle costs for continued housing of evicted staff and those for D&D of the buildings (730-M and 742-A) should be provided along with projected life cycle cost savings from elimination of the structures. Capital costs for replacement of these buildings is also requested." Ms. Belencan stated that 742-A is being reserved for Historical Preservation purposes and the costs benefit analysis presented justifies the removal of building 730-M.

Ms. Belencan proceeded with her update of the overall D&D program noting accomplishments, work in progress, D&D contractual scope change additions and deletions. Ms. Belencan wrapped up by stating the original scope of D&D by FY06 was 242 buildings, however the new scope per contract changes is 253 with 88 completed to date (see attachment).

Response to CAB Recommendation 185 "SRS Environmental Monitoring Program"

Pete Fledderman, WSRC, provided a presentation in response to CAB recommendation #185 (see attachment). Mr. Fledderman stated that the recommendation was adopted by the CAB March 23, 2004, and made the following five recommendations:

1. Increase monitoring of long-lived nuclides
2. Open REMP meetings to the public
3. Separate and report deer and feral hog doses
4. Expand shellfish and bivalve monitoring near Savannah, Georgia
5. Prepare report in both PC and MAC file format

Mr. Fledderman responded that SRS has conducted I-129 and Tc-99 analyses since 2001 but inadvertently omitted data in 2001 and 2002 reports. The data was included in the 2003 report.

SRS has continued expanding the I-129 and Tc-99 monitoring program and an expanded monitoring results discussion will be included in the 2004 report. Mr. Fledderman explained that a REMP meeting is a technical working session for members (SCDHEC, GADNR, Southern Nuclear Co., Chem-Nuclear Systems; DOE and WSRC). Members conduct radiological environmental monitoring and analytical programs and the data and information discussed is considered preliminary or proprietary and is not disseminated outside the REMP meeting.

Mr. Fledderman commented that SRS has reported deer and feral hog concentrations and doses separately in 2003 for both offsite hunter and the maximum exposed onsite hunter. He also stated that sampling for shellfish and bivalves have been collected for 20 years. No man-made nuclides have been observed. Mr. Fledderman concluded that the next Environmental Report would be available in both PC and MAC file formats. Karen Patterson asked if the monitoring report had the same information as found in the REMP, to which Mr. Fledderman responded it did. Bill Lawless asked about the next issuance of the Environmental Monitoring Report. Mr. Fledderman stated the report would be available for the September CAB meeting.

Waste Management Committee Report

Bill Lawless, Waste Management Committee Chair, opened the meeting with announcements of upcoming meeting dates.

Joe Carter, WSRC, gave some background information on high level waste (HLW) at Savannah River Site. Mr. Carter gave a very brief "refresher" of the origin, storage, and disposition path of HLW. Alice Doswell, DOE, provided a HLW Status and Update (see attachment). Ms. Doswell began by telling the group about Media Day sponsored by DOE on July 19. She stated that everyone appeared to have gained a better understanding of the HLW system.

She continued by telling the group she planned to answer the DOE commitments outlined in past recommendations and to outline DOE's plans for managing and stabilizing HLW. She explained the waste levels in the tanks, the available working space, and the contingency working space. She illustrated to the group how processing 1 gallon of settled sludge increases the compliant

tank inventory by 1.3 gallons because of processing by-products. She outlined the impact of no salt processing on the tank farm space and added, if this pattern continues, there will be insufficient space to continue sludge feed preparation for Defense Waste Processing Facility by 2008.

She offered several options for optimizing tank space. Two of the short term options especially interested the WM committee. One is sending the unirradiated highly enriched uranium, which is a low level waste product, somewhere other than the HLW system. Another option would be to deploy a cesium and actinide treatment (Caustic Side Solvent Extraction, CSSX) for limited low curie salt disposal. Long term options followed by the committee are bringing the Salt Waste Processing Facility (SWPF) on line by 2009 and reducing DWPF recycle via an acid evaporator.

Ms. Doswell outlined the progress on the SWPF project. She covered the design, schedule, and cost. Bill Lawless asked if the WIR lawsuit had an impact on the project completion delay. Ms. Doswell answered that bringing the facility on line is not impacted by the lawsuit. Terrel Spears, DOE, added that the design should continue since the WIR has to do with disposal of the material.

Glynn Carroll questioned the vitrification process and referred to an Atlanta newspaper article which indicated vitrification had been abandoned. Mr. Spears clarified that there are two waste streams...one highly radioactive waste stream will eventually be sent to DWPF for vitrification. The other stream is a low level waste that will be mixed with grout at Saltstone. He continued by clarifying the technologies that will be used in the SWPF. He briefly explained the CSSX and the separation techniques for cesium and the actinides.

Next, Ms. Doswell outlined the HLW tank closures at SRS. She described the two tanks (17 & 20) closed by DOE in 1997. She explained that DOE missed the closure milestone for Tanks 19 and 18 because of the WIR lawsuit. The DOE sent a draft revised Federal Facilities Agreement (FFA) closure schedule to SCDHEC on July 23 proposing new closure dates of October 2006 for Tank 19 and February 2007 for Tank 18.

Lastly, Ms. Doswell updated the committees on the Glass Waste Storage Building #2 Project, which is ahead of schedule. DOE awarded the contract to The Krog Corporation (New York) in March 2004. The excavation for the project is complete, and DOE anticipates turnover to Operations on March 31, 2006.

Mr. Lawless thanked Ms. Doswell and asked that the CAB consider two WM Committee recommendations (see attached). He introduced Murray Riley, motion manager for the WM recommendation "DWPF Recycle." Mr. Riley read the motion and asked for comments. Several requests for word changes were presented. Shelley Sherritt, SCDHEC, asked that the recommendation state that processes are "discussed with" SCDHEC instead of "negotiated" among SRS, SCDHEC and NAC. She added that SCDHEC agrees that we need to move forward quickly because of the waste in the tanks. Discussion ensued over the word "incentive" in Part #1 of the recommendation. Joe Carter clarified the acid evaporator's purpose and function. After several word changes, the committee moved on to the second WM Committee recommendation.

Mr. Lawless introduced, Mary Drye as motion manager for "Public Dissemination of Waste Disposition Information." She offered a brief summary of the motion and asked for questions or discussion. Karen Patterson questioned Part #1. She believes that educational forums contribute very little to changing anyone's position on an issue. Bill Lawless disagreed and added that he had attended several forums with huge turnouts and meaningful discussions.

Glynn Carroll, GANE, asked that the Georgia Department of Natural Resources be included on the panel for these educational forums. Several CAB members outlined their efforts in attempting to have a Georgia DNR representative. Ms. Carroll offered to help in this effort.

Lee Poe told the group that he has read all of the newspaper articles full of misinformation. He believes the CAB has a wonderful opportunity to write factual articles to provide the press factual and useable information. He believes the motion is a good direction, but needs more depth and definition. Several changes were discussed for incorporation.

Strategic & Legacy Management Committee

William Lawrence, Strategic & Legacy Management Committee Chair, opened the meeting with a few updates regarding signing of a programmatic agreement and plans for a Risked Based End State Workshop in October.

Savannah River Site Environmental Management Budget Update

Jim Buice, DOE, provided an update on the SRS 2004 and 2005 budget (see attachment). He presented a summary of the following budget categories by project baseline summary.

Mr. Buice presented Life-Cycles and End States of the following major EM projects

- Complete Stabilization and Disposition of Solid Waste (SR-0013) by 2009
- Complete Stabilization of all Nuclear Materials (SR-0011) by 2010
- Complete Disposition of EM Legacy Spent Nuclear Fuel (SR-0012) by 2020
- Complete Liquid Tank Waste Stabilization and Disposition (SR-0014) by 2020
- Complete Soil and Water Remediation (SR-0030) by 2025
- Complete EM Facility D&D (SR-0040) by 2025
- Completion of EM Cleanup by 2025

Mr. Buice stated that the Gold Metrics are used to demonstrate a quantifiable deliverable that can be tracked to program completion. Mr. Buice presented some of the key budget highlights for FY2004 and FY2005.

- The FY2004 EM budget is \$101 million higher than FY2003
- The FY2004 Budget supports continuation of SRS risk reduction and significant progress in achieving its accelerated cleanup objectives
- The FY2004 Budget was \$51 million short of meeting the GFSI funding commitment to WSRC

- Actions have been taken to address the \$51 million shortfall (administrative and scope deferrals)
- The resolution of the FY2004 shortfall was done in a manner that did not significantly impact planned workscope (though about \$26 million in real work activities were deferred)
- The FY 2005 Budget Request is currently being considered by Congress
- The FY 2005 Budget Request is up approximately \$111 million from FY2004 (assumes Congressional approval and release of the HLW Proposed Fund)
- An initiative will be needed to restructure the mix of on-site labor forces and subsequent work to optimize EM's accelerated cleanup objectives

Murray Riley asked if security would be receiving sufficient funding. Mr. Buice stated that SRS security activities should not be affected in any way during this budget period. Perry Holcomb asked if DOE would be re-competing the National Laboratories and if so would the Savannah River National Laboratory be subject to the action. Mr. Buice stated that he did not have an answer at this time, since DOE has not made that determination. Perry Holcomb asked if there was going to be a reduction in force in FY2005. Mr. Buice stated that he would anticipate a remix of the employees with some skills and crafts being eliminated, however, he did not have any indication as the number of people that would be affected at this time. Bill Lawless asked if the budget for legacy waste includes new waste that will be generated in the future. Sonny Goldston, WSRC, stated that TRU waste progress continues, and that all work would be doable assuming the SRS receives proper funding.

Savannah River Heritage Center Status and Plans

Todd Crawford and Walt Joseph provided an update on the status and plans for a Savannah River Heritage Center (see attachment). Mr. Crawford stated that the site embarked on a Deactivation and Decommissioning program to destroy structures and potential artifacts associated with the structures. Simply stated the site focus was mitigation and not preservation. Thus the Citizens for Nuclear Technology Awareness (CNTA) committee spearheaded creation of a Heritage Center for SRS. Mr. Crawford stated that a programmatic agreement among the DOE, State Historic Preservation Office, Advisory Commission on Historic Preservation, and consulting parties was signed July 8th, 2004. The DOE commitments were to establish an artifacts selection team, a lead heritage tourism team, to remove historic buildings in C-Area from the D&D list and to explore options for making a building available as a heritage center. CNTA is to perform a siting study for the heritage center. The SRS retirees association helped to move things along through interactions with DOE-SR Manager Jeff Allison, suggesting potential artifacts i.e. equipment, instruments, photographs, models, etc. for artifacts selection team and also listing people with expertise in specific buildings for artifacts selection team. The firm of Lord-Aeck-Sargent launched an architectural study and following a site tour on May 13th, they are preparing a preliminary report of their findings to CNTA. Mr. Crawford stated that CNTA is asking both city and county councils to adopt resolutions supporting SRS Heritage Center. The purpose of the resolutions are to introduce the concept to local areas, remind DOE of public support, and to provide content for grant applications. To date, seven resolutions have been signed with three or four remaining to be signed.

Walt Joseph continued by stating they are making ambitious plans for the vision of the heritage center and the promotion of public tours of C-Area reactor building. The heritage center is being considered for either an on-site or off-site building location. Mr. Joseph stated that the siting study is a deliverable to DOE as noted in the programmatic agreement, and shall be the basis for negotiation with DOE.

Mr. Joseph stated that CNTA is establishing an SRS Heritage Foundation, which will be a non-profit organization to include fund raising and the management of the heritage center. The current path forward is to recruit a Board of Directors. A pair of grants will be pursued to establish a detailed architectural plan, which will be the basis for fund raising. The second grant will be to develop 1-3 exhibits for store fronts.

In conclusion, Mr. Joseph stated that good progress has been made in realizing their vision, and that the challenge is to maintain momentum as they continue implementation.

Nuclear Materials Committee

Jerry Devitt, Nuclear Materials Committee (NMC) Chair, opened the meeting by announcing the committee had recently received a presentation on spent nuclear fuel and as a result had drafted a recommendation entitled Receipt of Spent Nuclear Fuel at SRS (see attached). He outlined the key points of the recommendation, and said that while the committee supports the receipt of such fuel at SRS, there was a concern that some of it may not be suitable for direct disposal to a federal repository. In addition, Karen Patterson, NMC Vice Chair, said that the Board should be aware that the federal repository was designed for commercial fuel. She explained that DOE fuel is more enriched and she believes the cladding was designed to be dissolved. She added that the cladding may not be as robust as commercial fuel. Since the final determination of what will be acceptable to the federal repository has not been made, Ms. Patterson said there is a potential that SRS could receive fuel that would have no disposition path.

Much discussion ensued about the order and specific content of the parts to the draft recommendation. Lee Poe expressed concern that the recommendation should focus on having DOE headquarters get a binding determination of what could be sent to the federal repository. Mel Galin concurred, but Perry Holcomb reminded the Board that DOE had not decided on what they are going to do with any of the fuel. Glynn Carroll stated that she felt it was doubtful that any defense waste would go to the federal repository at Yucca Mountain and it may be necessary to keep H-Canyon open unless robust dry cask storage was proven to be a viable option. Bill McDonnell told the Board that there is an effort by the US government to accelerate the collection of fuel in the rest of the world and given the potential security concerns, it would be a misguided perspective for this Board to say they didn't want it. Mr. Devitt thanked them for their comments and said their input would be considered as the recommendation was modified in preparation for the following day's meeting.

Karen Patterson introduced the second draft recommendation entitled Plutonium Shipments and Disposition (see attached). She stated that this recommendation was drafted prior to knowing the content of the following day's presentation to the Board on plutonium. While she acknowledged that this was unusual, the NMC felt that DOE should take immediate action to offset the public

and political anxiety that had resulted from recent newspaper accounts about plans to ship more plutonium to SRS. She reminded the Board of a recent DOE report to Congress that indicated that approximately 13 metric tons of plutonium did not have a disposition path. She explained that the committee is not as concerned as to what the ultimate disposition path is, but feels that such a decision needs to be made in an open process so that the many technical and political issues can have public debate. Ms. Patterson reviewed the key points of the recommendation and opened the floor for questions.

When asked if this recommendation was targeted only for excess plutonium, Ms. Patterson explained that it was assumed that the 34 metric tons of plutonium planned for the Mixed Oxide Fuel Facility would have a disposition path, and was not part of the plutonium in question. Mary Drye asked if the shipments to SRS had been stopped. Ms. Patterson responded that the Rocky Flats plutonium was already at SRS, but according to the DOE report, additional plutonium at Hanford and some DOE laboratories also required a disposition path. Donna Antonucci expressed her concern that the nation's plutonium should be protected and encouraged the Board to support bringing it to SRS. Bill Lawless reminded the Board that the Defense Nuclear Facilities Safety Board (DNFSB) had raised concerns about storage in 235-F. More discussion ensued about the adequacy of SRS storage and the need to bring a reasonable disposition plan to the public to avoid the perception of SRS as a dumping ground for this material. Ms. Patterson agreed to rework some key aspects of the recommendation prior to the Board vote on the following day.

Public Comments

Michael Berg, Carolina Peace Resource Center

Mr. Berg stated he was concerned about the language in one of the motions. He also said the CAB needs to look to and more seriously consider the work of scientists like Arjun Makajani. Mr. Berg stated the CAB should actively seek out candidates for the Board from organizations such as Greenpeace and the Sierra Club that represent a broad section of the public. He stated he is opposed to the Modern Pit Facility, but on issues dealing with waste, he does not see his organization in an antagonistic role. They all desire the same thing, which is to deal with the problem.

Leslie Miner, Environmentalist, Inc.

Ms. Miner stated she does not think legislation is a good idea and it sets a bad precedent dealing with the HLW issue. She stated a comprehensive plan for all three states impacted would be much better. She stated the grout plan would save \$16 billion and the Savannah River is worth that. We spend that amount in Iraq in a month, she said.

Lee Poe, Aiken, SC. Resident

Mr. Poe stated he had followed the CAB since the beginning and he is concerned about sending recommendations only to DOE and eliminating SCDHEC and EPA. He asked the Board to work hard to keep that from happening. What if DOE were to decide not to send a recommendation

officially to the regulatory agencies and it just dropped away. Mr. Poe also asked the CAB to pick up the responsibility to get facts to the newspapers and establish a file with legitimate information.

Glynn Carrol, Georgians Against Nuclear Energy (GANE)

Ms. Carrol stated she would like to talk to the CAB about the details of HLW. She said that South Carolina gives up the farm in the current Graham amendment and the law would be enforced by DOE. She stated this was not the right approach and there was nothing in place to make them keep their word. She said if the law is antiquated then the Nuclear Waste Policy Act should be amended with scientists dueling experts. That's the way we work, she said. If South Carolina gives up the farm, then Georgia has nothing to fall back on. She asked the Board to back a withdrawal of the Graham amendment.

Bobbie Paul, Womens Actions for New Directions (WAND)

Ms. Paul commented on the Georgia Department of Natural Resources grant for monitoring from DOE. She stated that \$300,000 had been reinstated in 2004, but the money is not there for 2005 and beyond. She commented on the Graham amendment and the manner in which it was tagged onto legislation and stated that if this is sound science then why not bring it before the light of day. This issue should be hotly debated since there are many unanswered questions.

The meeting adjourned at 5:45 p.m.

Tuesday, July 27, 2004, Attendance

SRS CAB Members

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Leon Chavous
Gerald Devitt
Mary Drye
Mel Galin
Cassandra Henry
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George Mishra, DOE
Brian Hennessey, DOE
Bob Pedde, WSRC
Jack Devine, WSRC

Gary Smith
Joe Whetstone
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Kelly Way, WSRC
Tiajuana Cocknauer, USFS-SR
Paul Deason, WSRC
Susan Dyer, BSRI
Gerald Lane, BSRI

SRS CAB members Darryl Nettles, Barbara Paul, Dorene Richardson, Gloria Williams-Way and Carlyne Williams were unable to attend. Jennifer Barrington resigned from the Board prior to the meeting. The meeting opened with Bill Spader, DOE, serving as Designated Federal Official. Pat Casey served as facilitator. The meeting was open to the public and posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

Chairman Jean Sulc dedicated the meeting to the memory of CAB Member Harold Rahn.

Approval of the Minutes

The meeting minutes of the May 2004 meeting were approved with no changes.

Agency Update

Jeff Allison presented a plaque to the Board to commemorate ten years of service. The plaque listed all CAB members who had served on the Board. Mr. Allison stated the CAB has many notable accomplishments over the past decade. The Board's first recommendation, which was spearheaded by Bill Lawless regarding independent scientific peer reviews, led to a standard operating procedure for the site over the past decade. The Board's emphasis in the early years on Transuranic Waste was invaluable in ensuring the success of that program and beginning shipments to the Waste Isolation Pilot Plant. The Board strongly influenced the environmental remediation program by establishing areas that should only be considered for industrial uses in the future. Since SRS did not have a declared future use, the Board recommendation provided a clear path forward by which cleanup decisions for near term CERCLA units could proceed. It also enabled DOE to save millions by attaining less restrictive industrial-use cleanup standards for zones clearly used for industrial purposes presently and in the future. Mr. Allison said the Board has been instrumental in improving and maintaining a positive relationship with the site regulators. And of course, the Board has been paramount in providing public access to the site and helping to educate the public through its various outreach initiatives.

Bill Spader announced that late yesterday there was an industrial event that resulted in a fatality. He did not have details of the accident. Mr. Spader announced that the Programmatic Agreement on Historic Preservation was signed on July 8 in Aiken. The DOE-SR Manager; the NNSA-Savannah River Site Office Manager; the Mayors of Augusta, Aiken and New Ellenton, the

Citizens for Nuclear Technology Awareness; and the Deputy State Historic Preservation Officer participated along with the SRS CAB. William Lawrence attended. Mr. Spader also provided an update on the Risk Based End State document. The public comment period ended May 21 and comments were received from the CAB and EPA until May 26. A workshop on RBES documents is scheduled for October 2004 in conjunction with the National Governors Association. Mr. Spader stated DOE would be finalizing the RBES in December. Mr. Spader also discussed the Performance Management Plan 2004 draft, which describes cost scope and schedule for completing cleanup by 2025. He stated it has served as the basis for 2006 planning activities. It is currently undergoing independent review and is expected to be completed in November 2004. Mr. Spader announced that DNFSB representative John Contardi, has joined representatives at SRS. Mr. Contardi came to the board in September 2000 from the Nuclear Regulatory Commission.

Shelley Sherritt, SCDHEC, noted the CAB would be seeing some changing faces. She is filling in for Keith Collinsworth temporarily and Myra Reece has been replaced by Rick Caldwell, who worked in the district in the upstate. Ms. Sherritt also mentioned that SCDHEC has a new head of Environmental Quality Control, Robert King, and that Jeff Allison and Bill Spader had met with them in June. Ms. Sherritt restated SC DHEC's position on high level waste. She stated the Department wants to move forward on the tank closure. The tanks are leaking and are a high risk. Secondly, the vast majority of that waste needs to be treated and disposed properly in a federal repository. SCDHEC should have a role in how that happens. A strong role, she said. SCDHEC will support whatever vehicle allows us to get there. The Graham amendment gives the state a more recognized role than in the past and is the forefront vehicle to allow things to move forward. Ms. Sherritt stated SCDHEC is looking at the total picture to form a comprehensive solution.

Dawn Taylor, EPA, noted her department is in full support of SCDHEC's position on the high level waste tanks. EPA defers to SCDHEC, she said. Ms. Taylor also announced that the branch and chief position at EPA had been advertised and currently are vacant. She also noted budget cuts and that the Superfund program may be cut. She stated she hopes this does not impact the level of effort at SRS. Ms. Taylor also noted that EPA had formed a forum of DOE complex-wide site representatives to exchange ideas.

Public Comments

Joe Whetstone, Bluffton, S.C. (Written comments provided below)

"Good morning. My name is Joe Whetstone. I am a retired employee of the state of South Carolina. I live in Beaufort County and the drinking water for our home comes from the Savannah River. I consider myself an environmentalist. I want to thank the members of the Citizens Advisory Board for their hard work representing the interest and health of the citizens in our region. Of the four methods for the disposal of cesium still being considered by DOE, direct disposal to grout poses a threat to our National Security. This was mentioned in the Independent Review of WSRC Process for Selection of HLW Salt Disposition Alternatives report, dated October 1998. Reading from the section Direct Disposal as Grout:

"This alternative will not support the Can-in-Canister mission since cesium will not be incorporated into the borosilicate glass thus the plutonium will not be as well protected against sabotage without the gamma radiation from the cesium." Remember, this was written in October of 1998, almost three years before

September 11, 2001. It is inexcusable that DOE would still give any consideration whatsoever to the direct disposal of cesium in grout given the conditions we are all living under today. A review of the CAB minutes indicates an attitude problem exists at the DOE concerning the proper funding for SRS cleanup. For Example: I am reading from the minutes from the July 2001 CAB Meeting held in Columbia. The section is titled: Budget update by Tom Heenan of DOE. Quoting from the minutes of this meeting:

"Mr. Heenan also briefly discussed the EM top-to-bottom review stating the Secretary (aside – "with a capital S") has determined it is not going to take decades and millions of dollars to cleanup the DOE complex. The complex as a whole is looking at internally imposed requirements that cause the program to be more expensive than need be."

DOE should not only release, but increase the funding for SRS cleanup by working with Congress.

Funds should be provided for research grants to develop semi autonomous robots to remove the radioactive sludge from the waste tanks at SRS once the liquids and salts are removed. Simultaneously, DOE should push to get the solvent extraction plant, or at least a prototype of the three responsible solutions, under consideration up and going. The extracted cesium must be vitrified with the plutonium at the DWPF in order to keep plutonium out of the hands of terrorist.

Whether this battle over grout removal from the HLW tanks at SRS is won or lost, the liquids and salts must be removed as soon as possible. To say environmentalists are holding up cleanup is simply not true. Proper cleanup is exactly what environmentalists want. The true holdup to cleanup is funding. CAB, Environmentalists and DOE all know this, but only CAB and Environmentalists will admit it. If we allow DOE to continue doing nuclear on the cheap here in South Carolina, we will continue to be the nuclear garbage dump of the nation. Pumping in grout over highly radioactive sludge and direct disposal of cesium to grout will assure this."

Glynn Carroll, Georgians Against Nuclear Energy, Atlanta, Ga.

Ms. Carroll stated she was encouraged that the CAB had expressed intentions to get a Georgia Representative on the Board. Ms. Carroll said that in response to the hypocritical oath, the first principle is do no harm. She stated she is very concerned that the current legislative approach would remove any legal restrictions and mechanisms. As administrative changes are made, there is no mechanism to keep DOE from doing what they want. This legislation would make DOE the legal authority. Ms. Carroll said she was looking at the draft of HLW recommendation to be considered later in the morning. She said this would be a suitable vehicle, but it becomes moot pretty fast. The debate in Congress is going to go down quickly. Ms. Carroll stated she had made sweeping changes to the recommendation including changing the title to "Recommendation of

Alternative Legislative Approach to HLW." She suggested additional changes as well. She also requested to receive a copy of the report listed as Reference 4.

Chuck Hill, IUPAT Labor Union 56

Mr. Hill spoke on behalf of construction workers at SRS. He noted upcoming projects like Glass Waste Storage Building, where "DOE has sold out" and recommended that they use the site stabilization agreement the labor union has in place at SRS to ensure workers jobs, so that local people do not get laid off. He implored DOE to stop bringing in contractors from out of state.

Chair Update

Jean Sulc reported on the status of the 8A contract, noting she and Mel Galin had a positive impression of the selected firm. The firm's bid package was submitted July 16 and is undergoing negotiations. Ms. Sulc also noted that the CAB has not yet received written guidance on transmitting recommendations to agencies. Mel Galin noted the upcoming SSAB Chairs meeting to be held in early October at Hanford.

Facilitator Update

Dawn Haygood presented the Recommendation Summary Report (see attached). Eight recommendations are pending, 30 open and 154 closed. The Board is awaiting one response from DOE regarding Salt Waste Disposition. Ms. Haygood announced that the SRS CAB will hold an Education Retreat September 10-11 in Charleston, S.C. and provided a draft agenda (see attached) for consideration.

Waste Management Committee

Bill Lawless, Waste Management Committee Chair, provided background information on two draft motions regarding high level waste issues for Board consideration (see attachments). Mary Drye presented the draft motion titled "Public Dissemination of Waste Disposition Information." The SRS Citizens Advisory Board (CAB) is interested in factual information reaching stakeholders and media and recommended that DOE-SR hold an educational forum on the waste disposition and tank closure strategy. The Board also asked that DOE-SR provide access to pertinent reports and articles under a special Waste Disposition and Tank Closure section on the SRS CAB web site with links to credible, third party sources and that DOE-SR provide rapid news releases, background point papers, or fact sheets to clarify misleading and/or non-factual information in the media or in public debate. Meryl Alalof moved the Board adopt the motion and Karen Patterson seconded. The motion passed unanimously by a vote of 18 members in favor.

Strategic & Legacy Management Committee

Paul Deason, WSRC, provided a presentation regarding the Savannah River National Laboratory (SRNL) (see attachment). Mr. Deason discussed the background of SRNL, which began operation in 1953. The original missions included reactor research, chemical separations/heavy

water extraction, reactor fuel fabrication, tritium/hydrogen technology and environmental science and monitoring. SRNL has a total staff of 940 and total funding of \$133 million. SRNL became the 12th national laboratory in May 2004. Mr. Deason discussed the benefits of national laboratory designation, how SRNL is involved in National Security, Environmental Management and Energy. He discussed the diverse technical capability of the lab, where the lab works, and the lab's facilities. Mr. Deason stated that SRNL is recognized for excellence in innovation and discussed core and enabling technologies. Key enabling technologies at SRNL include analytical chemistry, computation, modeling and statistics, materials technologies, fracture mechanics and research standards and calibration. Mr. Deason discussed major SRNL program areas; waste processing research and development, environmental biotechnology, hydrogen technology and technology transfer and commercialization. Mr. Deason concluded by discussing SRNL strategic initiatives.

Public Comments

Meryl Alalof, CAB Member

Ms. Alalof stated she echoed the gentleman's remarks regarding bringing in workers from the North. She stated it's important that we look to our local community and local workers. There are too many people being laid off and this is impacting our economy. She commented that the Board may not be chartered to look at this issue, however CAB members are individuals who can write letters and address this concern. Her sentiments were reverberated by William Lawerence and Donna Antonucci.

Glynn Carroll, GANE

Ms. Carroll stated she had put her time in this year and the CAB was limiting her (speaking time designation). She said she thinks there's a chill on public comments going on with the Board and suggested that the Board look at whether they are really inviting public comments. She said the policy became stricter after she attended her first meeting and the Board could fake it a little better if they were going to blow off input.

Mary Kelly, League of Women Voters

Ms. Kelly stated she had been following these issues for many years since the CAB was started. She reiterated comments on environmental representation. She said this representative should be endorsed by an environmental organization. Ms. Kelly stated the Board has undergone a number of changes. There was an era when it was generally hostile to people like her. She said she thought the board now had a better perspective and openness to the public. The current committee is more open with more balanced work. . She stated the CAB needs to think about interactions with the general public and how it can be more open to the general public.

Lee Poe-Aiken, S.C.

Mr. Poe stated that he is a pretty dedicated stakeholder but he is not a member of the CAB. He commented that this is not the meeting to prolong and understand and try to participate in. He

commented that he attends and participates in committee meetings and adds a lot to what the CAB is saying. He stated he supports the system. The biggest disadvantage he sees is outreach. Mr. Poe commented that the CAB needs more outreach to the public.

Joe Whetstone-Beaufort, S.C.

Mr. Whetstone said it was his understanding that the tritium level is going down, according to Beaufort-Jasper Water Authority. He said he was glad there are others from the Beaufort area on the board. Mr. Whetstone asked the CAB to encourage people who have questions about what they think are bad answers to ask questions on line and then be big enough to answer them. Mr. Whetstone commented that if you put grout in a tank, there is nothing we can do about it. He stated this was his first opportunity to attend a CAB meeting and he planned to attend WM Committee meetings from this point forward.

Don Orth, Aiken, S.C.

Mr. Orth commented on the categories on the board for Environmental Activists. He read the definition from the CAB Membership Application and said there is definitely opportunity for Environmentalist to apply.

Administrative Committee Report

Meryl Alalof, Administrative Committee Chair, reported that the committee met on June 29. She stated there is an opportunity to fill several positions with good people in 2005 and there are applications available to anyone who would like to apply. She encouraged members of the public to apply and asked CAB members to assist in locating potential applicants. The application deadline for 2005 is September 30. Ms. Alalof explained that there are 13 positions to fill, with five vacancies and eight members eligible to run for re-election. There was lengthy discussion regarding the DOE-Headquarters appointment process and the fact that it now requires 90 days. The Board agreed to see how the process goes this next year and then discuss the need to change their election process. Ms. Alalof presented the CAB budget for FY04 (see attachment).

Meryl Alalof presented a Bylaws Amendment Proposal (see attached). Karen Patterson suggested different terminology may be more appropriate than "in collaboration with" regarding EPA and SCDHEC and recommendation transmittal. It was determined that this amendment was premature. Bill Lawless agreed with sentiment that "in collaboration with" is premature at this time and asked for feedback from EPA and SCDHEC on these changes coming down. Dawn Taylor, EPA, stated she does not think it would be as effective if you send recommendations through DOE and Shelley Sherritt of SCDHEC said it would not cut down on our responsiveness at all.

Perry Holcomb read several portions of the Federal Advisory Committee Act, noting it as law and that if DOE insists on making all recommendations be transmitted directly to them or via them, then they are not within the spirit of the law. Perry Holcomb moved to table this particular amendment that deals with communications to the agencies until the guidance is received by

Headquarters. Mary Drye seconded the motion and later Mr. Holcomb withdrew the motion as the entire board agreed to wait on further guidance from DOE-Headquarters.

Board members also had lengthy discussions regarding proxy voting, changes to the bylaws and committee membership. It was agreed that the Administrative Committee would reconvene and discuss the comments and rework the bylaws amendment proposal.

Facilities Disposition & Site Remediation Committee

Perry Holcomb, FD&SR Committee Chair, noted several changes to the Recommendation Database and announced upcoming meetings.

Integrator Operable Units

Brian Hennessey, DOE, provided an update on the Integrator Operable Units (IOU) (see attachment). Gerald Lane, BSRI, discussed the IOU Geographic Information System. The GIS project and tools were developed to display and assist in the understanding of the data and information; to automate the "data crunching;" to display the results of the evaluations and to become a living communication tool. He discussed the various IOUs and status of actions at each IOU. Susan Dyer, BSRI discussed the ecological activities associated with the IOUs. She discussed bioassessment monitoring, a fish movement study, and wildlife surveys. She discussed the constituents of concern for each IOU regarding subsistence fisherman. Largemouth bass residing in upper Steel Creek are likely to remain there. Most largemouth bass originating from near Steel Creek remain near SC. Few relocate more than 12km from Steel Creek. Relatively few fish passed through the outlet structures of either Steel Creek. Ms. Dyer concluded that there is no evidence that fish tissue contaminant increased over time in any stream.

Nuclear Materials Committee

Plutonium Update

Charlie Anderson, DOE, provided a Plutonium Update (see attachment). He provided definitions of Excess Plutonium: plutonium which is not required for national security purposes and Surplus Plutonium: plutonium which is not required for any programmatic or national security purposes. There are approximately 50 metric tons of excess plutonium in various forms, including pits, metal, oxide, residues and fuel at six DOE sites. Mr. Anderson brought displays of the 3013 canister and discussed the DOE 3013 standard. He also discussed the 9975 shipping container used to transport the 3013 canisters. He discussed various decisions made under the National Environmental Policy Act since 1995. The Interim Management of Nuclear Materials Final Environmental Impact Statement of October 1995, and Record of Decision and Notice of Preferred Alternatives for the Interim Management of Nuclear Materials, December 19, 1995 included evaluation and decision to construct a 2,000 position Actinide Packaging and Storage Facility.

The Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement (Storage and Disposition PEIS), DOE/EIS-0229, December

1996 preferred alternative involved shipment of Rocky Flats non-pit plutonium to SRS and storage in an expanded APSF (5,000 positions). The Record of Decision for the Storage and Disposition of Weapons-Usable Fissile Materials Final Programmatic Environmental Impact Statement, *Federal Register*, Vol. 62, p. 3014, January 21, 1997 listed the decision to upgrade facilities at Pantex and SRS; consolidate Rocky Flats plutonium at Pantex and SRS; maintain plutonium storage at Hanford, Idaho, and Los Alamos National Laboratory; and pursue plutonium disposition via a dual strategy involving Mixed Oxide Fuel and Immobilization.

An Amended Record of Decision for the Storage and Disposition of Weapons-Usable Fissile Materials *Federal Register*, Vol. 63, p. 43386, August 13, 1998, with *Supplement Analysis for Storing Plutonium in the Actinide Packaging and Storage Facility and Building 105-K at the Savannah River Site* (APSF/B105-K SA), July 1998 brought forth the decision to construct 105-K (K Area Material Storage or KAMS) for storage of up to 15 MT of surplus plutonium materials for up to 10 years (to support accelerated closure of Rocky Flats). The following NEPA actions pursued:

- *Surplus Plutonium Disposition Final Environmental Impact Statement*, DOE/EIS-0283, November 1999 and Record of Decision, January 2000.
 - Decision to pursue hybrid approach for the disposition of surplus plutonium
- Amended Record of Decision on Interim Management of Nuclear Materials, *Federal Register*, Vol. 66, p. 7888, January 26, 2001.
 - Decision to cancel APSF and initiate project to install stabilization and packaging capability in Building 235-F at SRS.
- Amended Record of Decision on Interim Management of Nuclear Materials, *Federal Register*, Vol. 66, p. 55166, November 1, 2001.
 - Decision to install stabilization and packaging capability in FB-Line at SRS and cancel the installation in Building 235-F
- Amended Record of Decision Surplus Plutonium Disposition Program, *Federal Register*, Vol. 67, p. 19432, April 19, 2002.
 - Decision to cancel the Immobilization Facility and implement the alternative considered in the Storage and Disposition PEIS of consolidated long-term storage at SRS of surplus, non-pit plutonium stored separately at Rocky Flats.
 - Supplemental Analysis to evaluate the potential impacts of storage of plutonium materials in KAMS for up to 50 years
- Amended Record of Decision Surplus Plutonium Disposition Program, *Federal Register*, Vol. 68 p. 20134, April 24, 2003.
 - Decision to pursue MOX only strategy, disposing of 34 MT of surplus plutonium, including approximately 6.5 MT of the 17 MT of surplus plutonium originally intended for immobilization
 - Additional processing capability added to MOX design to disposition 6.5 MT of the 17 MT of surplus plutonium

Mr. Anderson presented the Environmental Management (EM) Program Objectives for the Management and Disposition of Nuclear Materials as follows:

- Top-to-Bottom Review Completed in February 2002

- EM Policy (Initial October 2002, reiterated June 2004):
 1. EM nuclear footprint should be shrunk to the maximum extent possible
 - Addresses national security concern and is prudent financial management
 2. Maximize near-term disposal at waste disposal sites, such as the Waste Isolation Pilot Plant (WIPP) and low level waste disposal sites
 3. Transfer custody of nuclear materials that have an approved mission need to the appropriate Lead Program Secretarial Office (LPSO)

Mr. Anderson provided a current status and path forward. SRS is packaging plutonium to the DOE-STD-3013 in FB Line and will be complete by September 2005.

Surveillance and Monitoring capability for 3013 cans is being installed in Building 235-F.

No plutonium will be shipped to SRS without an identified disposition path. There has been no consolidation decision by the Department. DOE is doing some very, very preliminary work on a path for disposition that would either address the "non-MOXable" plutonium, or all of the plutonium at SRS if MOX does not move forward. This would primarily be used to obtain funding for conceptual type engineering and design, which would provide the basis for disposition of this plutonium. The Plutonium Immobilization Plant was terminated. Vitrification appears to be the baseline technology due to the experience and development work performed for the Plutonium Immobilization Plant (PIP) and the Americium/Curium Vitrification Project, and vitrification is the form that most closely matches the waste forms planned for disposal in Yucca Mountain. H-Canyon does not appear to be suitable for all material due to:

- Process rate very slow
- Security upgrades required if plutonium mission extended
- After processing, much of the material would remain "Non-Moxable"
- Limited ability to utilize liquid waste system for plutonium disposal (Approximately 1 MT plutonium limit to Tank Farm)

The primary purpose of vitrification would be to disposition the material at SRS now; however vitrification could possibly be used for other plutonium materials not at SRS.

Perry Holcomb stated that saying, " No plutonium shipped to SRS without a disposition path," is a political statement. Mr. Holcomb stated, he has already seen DOE-HQ go against one of the best, technically accepted ways of immobilizing plutonium when they got away from glassified or ceramic matrix. He commented that it sounds good to the public, but is it really. Mr. Anderson assured Mr. Holcomb that the Secretary of Energy has heard the voice of South Carolina saying don't take anymore into South Carolina until you have a disposition point . We are going to define a disposition path. We do have a history of financial and technical uncertainty, but we've made a lot of effort to reduce those uncertainties, said Anderson.

Jerry Devitt presented a draft motion regarding receipt of spent nuclear fuel (see attachment). In an effort to improve the SRS Spent Nuclear Fuel (SNF) program, the committee recommended that DOE-HQ continue to investigate and implement an SNF disposition strategy that will accelerate the program and requested an update on the SNF program uncertainties by January 15, 2005. It also recommended that DOE-HQ identify SNF that can not be directly disposed into the Federal Repository prior to its shipment to SRS, and establish and document an alternative disposition prior to accepting it for shipment to SRS and asked DOE-HQ to present the direct disposal form of spent fuel to the Nuclear Regulatory Commission immediately and obtain a binding determination that it can actually be disposed in the Federal Repository. The committee recommended that DOE-HQ keep H Canyon operable until there is certainty that spent fuel, which could be processed there, can be disposed in the federal repository. Bill Vogeles called for the motion and Bill Lawless seconded. The motion passed by a vote of 16 members in favor and two opposed. Mel Galin submitted a minority report.

Karen Patterson presented the draft motion regarding Plutonium Shipments and Disposition (see attachment). DOE is developing a disposition plan for its excess plutonium. The SRS CAB is concerned that DOE may already have a proposed plutonium disposition strategy that they have not shared with the public. The committee recommended that DOE ensure an exit strategy exists before commitments are made to receive surplus plutonium at SRS. It also requested that DOE present the preferred proposed plutonium disposition strategy, its implementation, and schedule to the SRS CAB by September 26, 2004, and make available to the CAB and the public any studies to support this plutonium disposition option. The committee also requested that DOE ensure a public forum and comment period on the plutonium disposition option is included in the NEPA process. Bill Lawless moved the Board adopt the motion and Bill Willoughby seconded. The motion passed with sixteen members in favor and two opposed.

Public Comments

Glynn Carrol, GANE

Glynn Carrol asked when DOE anticipated having a construction start date for the MOX facility. Sterling Franks, DOE responded in May of 2005. Ms. Carrol commented that GANE is intervening at the Nuclear Regulatory Commission opposing construction authorization of the Mox facility. Ed Lyman wrote a contention that was accepted, she said. She noted they won't appeal until they begin construction and it's possible the NRC may not give permission to begin construction. The construction authorization request material control and accounting and plan to control and account for plutonium was only a page and we challenged this, she said. Dr. Lyman said it beautifully. The pressure is now on Duke Cogema Stone and Webster, said Carrol.

Bobbie Paul, WAND

Bobbie Paul, WAND, asked if the CAB seeks out reports on divisive issues as HLW. The National Academy of Sciences does go out and ask for reports from SRS. She commented that she had heard much about the media being at fault, but perhaps it is just a lot of different information out there, not necessarily misinformation. She commented that WAND would welcome the participation of this esteemed panel and asked if anyone looks at environmental

impacts on the workers. She was informed of the Center for Disease Control Health Effects Subcommittee.

Handouts

SRS CAB July 26-27, 2004 Agenda

D&D Project Response to Recommendation #192, Helen Belencan, DOE

Response to CAB Recommendation 185 "SRS Environmental Monitoring Program," Pete Fledderman, WSRC

Public Dissemination of Waste Disposition Information, Mary Drye, CAB

DWPF Recycle, Murray Riley, CAB

Update on High Level Waste Programs at SRS, Alice Doswell, DOE

SRS Environmental Management Budget Update, Jim Buice, DOE

SRS Heritage Center Status and Plans, Todd Crawford and Walt Joseph

Receipt of Spent Nuclear Fuel at SRS, Jerry Devitt, CAB

Plutonium Shipments and Disposition, Karen Patterson, CAB

SRS CAB Recommendation Summary

Public Dissemination of Waste Disposition Information Final Draft, Mary Drye, CAB

DWPF Recycle Final Draft, Murray Riley, CAB

Overview of the Savannah River National Laboratory, Paul Deason, WSRC

Bylaws Amendment Proposal, Meryl Alalof, CAB

SRS CAB Budget Summary, Meryl Alalof, CAB

Integrator Operation Units, Brian Hennessey, DOE

Lower Three Runs IOU Early Action Fact Sheet, Brian Hennessey, DOE

Plutonium Update, Charlie Anderson, DOE

Receipt of Spent Nuclear Fuel at SRS Final Draft, Jerry Devitt, CAB

Plutonium Shipments and Disposition Final Draft, Karen Patterson, CAB

SRS CAB Calendar

NEPA EIS Report

SRS Gold Metrics