

**Meeting Minutes**  
**September 26, 2011**  
**Charleston, SC: Combined Committee Meeting**

**CAB**

Tom Barnes  
Dr. Emile Bernard-*Absent*  
Dr. Donald N. Bridges  
Edward Burke  
Louie Chavis-*Absent*  
Mary Davis-*Absent*  
Kathe Golden-*Absent*  
Judy Greene-McLeod  
Dr. Rose Hayes  
Stanley Howard  
Dr. Kuppuswamy Jayaraman  
Travis Johnson  
Cleveland Latimore  
Denise Long  
Clinton Nangle  
Dr. Marolyn Parson  
Harold Simon  
John Snedeker  
George Snyder  
Skye Vereen  
Dr. Gerald Wadley  
Sarah Watson  
Alex Williams-*Absent*

**Agency Liaisons/Regulators**

David Williams, EPA  
Diedre Lloyd, EPA  
Kyle Bryant, EPA  
Shelly Wilson, SCDHEC  
Kim Newell, SCDHEC  
Von Keisler, SCDHEC  
H. Cathcart, SCDHEC

**Contractors**

Ginger Dickert, SRR  
Nancy Bethurem, SRR  
Jeannette Hyatt, SRNS  
Paul Sauerborn, SRNS  
Tim Jannik, SRNL  
Kristin Major, TechLaw  
Jenny Freeman, V3  
Erica Williams, V3  
James Tanner, V3  
Ashley Whitaker, V3

**DOE/Other**

Cate Alexander, DOE-HQ  
Gerri Flemming, DOE-SR  
Rebecca Craft, DOE-SR  
Rich Olsen, DOE-SR  
Patrick McGuire, DOE-SR  
Doug Hintze, DOE-SR  
Helen Belencan, DOE-SR  
Wade Whitaker, DOE-SR  
David Hoel, DOE-SR  
Armanda Watson, DOE-SR  
Terry Spears, DOE-SR  
Carol Connell, ATSDR

**Stakeholders**

Tom Clements  
Dennis Bickford  
John Gadd

Jenny Freeman, CAB Facilitator, welcomed everyone to the meeting. She noted the meeting was open to the public and went over the guidelines for public participation. She reviewed the day's agenda then introduced Cate Alexander, the Designated Federal Official (DFO) of the Environmental Management Site Specific Advisory Board (EM-SSAB) from DOE-HQ.

**PRESENTATION: EM SSAB Members and the Federal Advisory Committee Act (FACA) –  
Cate Alexander, DOE-HQ, DFO EM SSAB**

Ms. Alexander commended the CAB for being productive, and having a good relationship with site management. She asked the Board think of the role of advisory committees outside of the specifics of the information it is given on a daily basis. She spoke about the structure of advisory boards and that each of the SRS CAB members was one of approximately 45,000 members of 900 federal advisory committees. She stated there are two kinds of advisory board members—one is a “representative” and one is classified as “special government employees.” She clarified that representatives represent specific interests, or points of view, and special government employees are appointed because of their expertise. She said the SRS CAB is a “Representative Board.”

She stated that DOE is currently being investigated concerning the operation of its advisory boards and emphasized that the need for integrity of advisory committees depends, in part, on the commitment of its members to operate within the law.

Ms. Alexander went on to present information on the purpose of the Federal Advisory Committee Act (FACA), DOE's responsibilities and authority for the EM SSAB, what the members of the committee need to know, and the HQ views on the EM SSAB. She stated that the FACA was designed to fulfill two basic purposes: (1) to enhance public accountability of advisory committees, and (2) to reduce wasteful expenditures on advisory committees. She said FACA does not cover individual input, and it doesn't cover public meetings convened for collecting individual input for collective advice. She continued by stating that FACA ensures public input on government decisions,

prevents domination by special interests, and provides for open discussions of policy. She cited four sources of authority for establishing an advisory committee: (1) required by statute; (2) presidential authority; (3) authorized by statute; and (4) agency authority.

She explained that the EM SSAB was started in 1974 by the Environmental Management (EM) Office for the purpose of collecting community input; the EM SSAB is chartered as one board that has to be renewed every two years. She discussed achieving balance on the advisory committees and the selection process; DOE has the EM Advisory Committee Management Policy; the EM SSAB has its charter, guidance, and Standard Operating Procedures. Other guidance can be more specific than FACA but cannot conflict with FACA.

She discussed highlights of the DOE Advisory Committee Management Manual and EM SSAB Guidance, and other advisory board guidance. She covered the process for nominating and selecting advisory committee members and noted key points for achieving a balanced membership. Ms. Alexander went on to cover the responsibilities of the Advisory board member, as well as the DOE-EM responsibilities. She also discussed the DOE-HQ views on the EM SSAB and local boards.

CAB member Rose Hayes requested that Ms. Alexander return to the topic of Advisory board member responsibilities and expressed concern that on the SRS CAB, because of complexity of subjects dealt with, that members who do not have a background in nuclear waste management and related activities, if they are going to participated effectively on the CAB, will have to engage in extensive reading and research. She said the same goes for input for the many recommendations that has come out of the SRS CAB, and consequently, many new members find that they are required to spend a great deal more time informing themselves than they thought they would have to. She said sometimes they have to drop back or withdraw because they were not aware of the effort involved. Ms. Alexander agreed that more needs to be done to prepare new CAB members and that this information should be conveyed in the interviewing process. She said the Board needs to make sure they are communicating so that nontechnical people can understand and the community can relate to the subjects being discussed. She said mentoring relationships are recommended so that there are many points of contact for information.

Ms. Alexander stated representative members are not subject to federal conflict of interest statutes and regulations, but DOE requires that members essentially conform to general ethic requirements, which includes stating potential conflicts of interest and recusing oneself. She said the reason is that Congress is concerned and there is pending legislation that would require agencies to describe/prove why they are appointing someone as a representative and not a special government employee.

She went over additional Advisory Board Member responsibilities, especially regarding email exchanges. She said one of the issues in emailing another Board member is that if you are deliberating a matter of substance, that is actually defined as a meeting and should be noticed in the Federal Register and it should be open to others. She continued that if it is administrative matters, members can email each other, but cannot deliberate substance of the Board in any means that is not open to the public.

Ms. Alexander went over the DOE-EM responsibilities and DOE-HQ views on the EM SSAB and local Boards. She indicated that DOE would like to see that the EM SSAB local Boards become a hub for local site input.

She stressed the importance of a Work Plan for the tracking and evaluation of Board accomplishments. She stated there are three general charges from the Assistant Secretary: (1) Budget Priorities; (2) Waste Disposition Preferences; and (3) Improving Public Participation.

CAB member Marolyn Parson asked Ms. Alexander to share some insight into how other boards have successfully attracted the general public to attend the board meetings. Ms. Alexander said the most effective way is through speaking to various groups. She said the members can speak about the Board's work, and that it is often a good idea to invite someone from the site so they can answer any specific questions about the work being done.

CAB member Clinton Nangle asked if during the selection process for CAB membership, is a security background check a part of the process. Ms. Alexander said there is no security background check. CAB member Nangle then asked if all the material brought to CAB meetings to be presented on is unclassified. Ms. Alexander said it is unclassified. She said if it is coming to the Board it has to be made available to the public, so it cannot be classified.

CAB member Hayes said one of the most popular interfaces between SRS and the community is the tours that the site began to give in the last couple of years. She said these tours fill up so fast because of public interest. She asked Ms. Alexander to describe activities other CABs engage in, and to state if these activities are successful. Ms. Alexander said all of the other sites have tours, and some of them are nearly as frequent as the ones SRS hosts. She said the Nevada community has a great interest in visiting the Nevada National Security Site.

CAB member Hayes said the SRS public tours consist of bus rides. She said she doesn't think the public gets to walk through the facilities. She asked if there are tours by the other sites that are popular and what the contents of those are. Ms. Alexander explained where people can get off the buses depends on the situation at that site, as in how safe it is, the time, clearances, and similar issues. She added that other boards have special events on the weekends; she described some of these events, listing the Paducah site as an example.

CAB Chair Bridges said public input is a hot button issue for the CAB. He asked, in reference to the phrase "bang for the buck", how does DOE know when it has gotten its money's worth from the CAB, and what is Ms. Alexander's view on productiveness. Ms. Alexander said she would like to hear more on how the SRS CAB is wrestling with the issue of public input. She said DOE acknowledges that the Board doesn't speak for every individual, and that is to be expected. She added if the CAB increases or improves the atmosphere for people coming, listening, and being involved, that it is doing its job to the best of its ability. In terms of "bang for the buck," she said she doesn't think there has ever been a question about the local boards of the EMSSAB and invited everyone to look at the recommendations of the various local boards and consider them. She said she has read the proposed recommendations for consideration at the meeting. She said these recommendations are thoughtful and highly informed. She said there is no doubt the CAB is a highly engaged, thoughtful board.

CAB Chair Bridges said the CAB is thinking about a number of ideas concerning public participation. He said the CAB has its newsletter, the *Board Beat*, which is a publication that comes out twice a year, and there has been talk about an additional newsletter. He spoke about the Speakers Bureau. He said the CAB talked about trying to get to SRS retirees in some manner and give them an update on what the site looked like 10 years ago when they retired and what it looks like today. Ms. Alexander said the CAB could look into community associations or groups who meet on a regular basis. She asked the CAB if it was aware of the Environmental Justice Program. She explained that Environmental Justice seeks to engage those for whom environmental activities in the past have had a disproportionate impact.

Ms. Alexander continued with her presentation by listing items of interest to Congress and the transparency in government. She said she knows all committees are open meetings right now, but they are not noticed in the Federal Register. She continued by stating these meetings are not required to be noticed under FACA at this time, but every piece of legislation that has been introduced has included that they want these committees in the Federal Register. She said she believes in the future these meetings will have to be put in the Federal Register.

She touched on the agency's responsibility to ensure independent advice by the board. She said they have talked a lot about how the appointment of members is an agency responsibility. She said the agency is responsible for ensuring the membership is not dominated by special interests, or people with conflicts of interest, who could dominate or influence the deliberations of the Board and the recommendations that are given to the agency. She said the agency should not be recommending that the CAB pass any particular recommendation, and the agency should not be writing drafts of the CAB's recommendations, and neither should agency contractors.

CAB member Hayes said to Ms. Alexander that she made the statement that the boards are not made up of experts who are appointment to the board. She asked if that precludes members with technical expertise. Ms. Alexander said no, they are actually driving at the avoidance of compliance with the federal Conflict of Interest Ethics Statutes. She explained that special government employees have to comply with those. She said EM in the management of this particular board is concerned about appointing experts. She said the board is not supposed to be a board of experts. She continued that there can be people with expertise, but if the CAB members are experts, they are no longer going to be operating as a Citizens Advisory Board that brings community values to EM.

CAB member Ed Burke stated in the past, when decisions were made, expertise in the industry, or knowledge of the site, was valued. He asked to what degree is that being taken into consideration in the selection process. Ms. Alexander said that is being looked at more now than it was looked at in the past. She said it is a response to some

sites experiencing difficulty recruiting member, or where some members are dropping off the Board because they don't understand what is happening in the room; she added these are potentially very good members.

CAB member Burke asked during the membership selection process, would DOE consider either knowledge of the industry or knowledge of the site as a positive, a negative, or as having no value. Ms. Alexander said DOE is going to look at other factors first. She said if a Board has an expert who represents an under-represented area or an under-represented ethnic group, it is fine. She stated if DOE sees some groups that are absent from the Board but are still seeing experts come in where they are representing an area or a group that is already well represented on the board, DOE will say that expertise isn't enough. She summarized that DOE is looking for someone from the community who has an interest in the site and can bring a different perspective to the board.

CAB member Sarah Watson said it sounded like the CAB is in a "catch 22" situation. She asked how is it the CAB can achieve a happy medium with the language, the understanding, and the commitment to the board. She said there seems to be a gap. She said if a member is lacking in understanding the information, he or she is not considered as committed because it is taking them longer to grasp the information.

Ms. Alexander said CAB member Watson identified the issue very well, and it is all about striking a balance. She said they want to have people who are willing to learn and know that it is going to take a while to understand the issues that the Board has set out to deliberate. She said the Board is also going to have people who, if they do have familiarity with site, the work, and the technical field, are probably going to be up to speed faster. She said the CAB should not want to err on the side of only technical experts. She said this means the CAB is going to frame the issues in a technical way as opposed to framing with community values, interest, and concerns.

CAB member Hayes said the CAB was getting a mixed message. She said the SRS CAB has often been told that it is one of the most effective in the system because of the level and number of recommendations that it has passed. She said the SRS CAB would never have been able to do that without having a nice balance of membership. She said, speaking of balance, she felt Ms. Alexander seems to place greater priority on age, gender, ethnicity, and other mixes than on an expert level of understanding.

Ms. Alexander said she certainly didn't mean to say that people with expertise are not valued, because they are. She said she thinks CAB member Hayes was underestimating the average interested person within the community and his or her ability to come up to speed on the key issues facing the site within a relatively short period of time. She said expertise is important, but stated there are plenty of technical experts at SRS who can provide the CAB with technical information. She continued that if DOE had to choose between an expert and someone who is from an under-represented group, it would value the applicant from the under-represented group more.

Ms. Alexander asked the Board what its procedures are if the media calls, asking for information. CAB Chair Bridges said media requests are filtered through the CAB Support Team, and they relay that information onto the CAB chair. Ms. Alexander stated in the EMSSAB guidance, the Chair is the only one authorized to speak on behalf of the board. She explained the Chair, in speaking on behalf of the board, can only convey information that has come from the board. She then reviewed more on email communication between the CAB members.

Ms. Alexander stated if the meeting of the Executive Committee, for example, turns out to be a majority of the Board, the Executive Committee can meet without having a Federal Register notice as long as it is preparing for the meeting and not deliberating substance. She clarified that when deliberating substance, it is supposed to be a noticed, open meeting.

Ms. Alexander spoke about board member ethics and concluded her presentation after addressing all additional questions.

**COMMITTEE UPDATE: Facilities Disposition and Site Remediation (FD&SR) Committee-  
Marolyn Parson, Committee Chair**

CAB Member Marolyn Parson gave an update of the last FD&SR Committee meeting and the searchability of the SRS website. She stated she planned to write a Recommendation on that topic. She said there were no open or

pending recommendations within the FD&SR Committee and the next committee meeting as scheduled for Tuesday, October 25, 2011, from 6:00 p.m. to 7:30 p.m. at the DOE Meeting Center in Aiken, South Carolina.

**PRESENTATION: Agency for Toxic Substances and Disease Registry's (ATSDR's) Public Health Assessment Evaluation of Exposures to Savannah River Site Related Contaminants in Biota – Carol Connell, Health Physicist, ATSDR**

Carol Connell stated she would be talking about ATSDR's recently released public comment version of a public health assessment (PHA) that evaluated the public's exposure to Savannah River Site related contaminants in plants and animals. She exhibited the hard copy, which is 228 pages long, and stated that it can be found on the ATSDR website, which she listed as [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov).

She stated that the ATSDR is part of the U.S. Department of Health and Human Services, and a sister agency to the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. She explained that ATSDR was established by Congress in 1980 under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as the Superfund Law. She said the agency is required by law to conduct PHAs at each site proposed for EPA's National Priorities List (NPL), and the aim of the PHA is to find out if members of the public are being exposed to hazardous substances and, if so, whether the exposure is harmful to their health and should be stopped or reduced. She stated Savannah River Site was listed on the NPL officially in 1989. Ms. Connell said the CDC issued three documents between 1995 and 2005 addressing community exposures to radioactive materials released at Savannah River Site during the production years 1954 through 1992.

She continued that in 2007 ATSDR issued a PHA evaluating human exposures to offsite groundwater and surface water contamination. She said although there were several groundwater plumes on the Site, none of the plumes have migrated off the Site. She stated from this time period, ATSDR concluded that the surrounding community health would not be harmed by site-related groundwater or surface water contamination. She clarified that the current PHA evaluates human exposures from eating plants and animals potentially contaminated from contaminants released from 1993 through 2008.

She presented a generic diagram of major pathways for contamination.

Ms. Connell said ATSDR evaluated environmental sampling data and information reported by DOE and several South Carolina and Georgia state agencies. She continued that ATSDR reviewed information concerning on- and off-site hunting, fishing in the Savannah River, and local farming activities. ATSDR concluded that the general population is not exposed to harmful levels of radioactive contaminants if they eat offsite crops, livestock, fish, and wild game harvested or produced near SRS. She further explained that people eating onsite animals harvested during controlled hunts are not likely to be exposed to harmful levels of radioactive contaminants but animals need to be monitored before leaving the site.

She said in the years 1993 through 2008, only one animal was ever confiscated due to contamination.

Ms. Connell stated that Mercury concentrations are elevated in some fish found in the Savannah River. She said consuming fish, especially largemouth bass, bowfin, and catfish, from certain portions of the river, might increase health risks, especially to sensitive populations. She added that, although SRS may be one of the sources of Mercury, there are other potential sources in the area. She continued that some fish from the Savannah River can be eaten without harm to people's health if species-specific consumption advisories issued by South Carolina and Georgia are followed.

CAB member K. Jayaraman expressed concern about the data being used in the ATSDR, asking if the information being used in the report is adequate.

Ms. Connell said the ATSDR is worded the way it is because it is technical. She said she appreciates CAB member Jayaraman's comments, especially at a period in time when it is under public comment. She said there may be things that need to be clarified more or worded differently. She encouraged CAB members to submit comments or questions to her and they will be addressed in the final copy of the document.

CAB member Ed Burke stated that in the section where Ms. Connell discussed Mercury, she compared the levels of mercury in onsite animals versus offsite animals and asked when she said offsite, what geographic area is she considering. Ms. Connell said she is referring to outside the boundary. She said they also consider Crackerneck offsite because that is open to the public.

#### **COMMITTEE UPDATE, CONTINUED: Facilities Disposition & Site Remediation Committee**

##### **Draft Recommendation: Federal Facility Agreement (FFA) Update Provided Annually Recommendation Discussion**

CAB member Clinton Nangle, who served as the Committee's Recommendation Manager, reviewed the recommendation for discussion.

David Williams, EPA, ask why the CAB would like to see Appendix E before EPA and South Carolina DHEC as was stated in the recommendation. CAB member Parson said that is so the CAB can have input. She said the Board has been seeing it when Appendix E has been finalized. She stated the CAB has just been given a report of what is going to happen, rather than being able to provide input into what is happening on the site, such as what the priorities are. Mr. Williams said they all go through quite a bit of debate once it is submitted to the regulatory agencies. He said they don't hand the agencies an appendix and it is accepted. He continued that they negotiate the appendix, and wouldn't have any problem with the CAB getting it at the exact same time that everyone gets it. CAB member Parson asked if Mr. Williams was saying the CAB can't have any input. Mr. Williams responded the CAB could have input while all the agencies are negotiating the Appendix. He said he would suggest changing the wording in the recommendation to read "allow the CAB to provide input while revisions to Appendix E are being negotiated between DOE, EPA, and SCDHEC".

Wade Whitaker, DOE-SR, stated the first submittal of Appendix E is due November 15, and the CAB has October written on the recommendation, so that is where Mr. Williams is coming from. He said October would be a little premature as it would be before DOE is prepared to submit it to the regulators. He said maybe the regulators can state that the same time we submit the document to them, we can submit it to you. He explained that DOE submits it, a few comments come back, and then DOE still has another submittal.

Doug Hintze asked why DOE cannot give the CAB Appendix E in the October timeframe. Mr. Whitaker said because DOE will not be ready. He said DOE has a schedule that is in the FFA. He said he is suggesting that maybe the recommendation can be changed so they can submit to the CAB on November 15. CAB member Parson stated there is a report of the FFA Annual Progress Report for Fiscal Year, and for 2010, the date was November 2010. She said there must have been some sort of thought process before November, or this would not have been published in November. She said this is why she chose October as a deadline.

Helen Belencan, DOE-SR, commented that maybe this time of year, DOE could give an update that says how it has proceeded in our FFA commitments and that would give the CAB some sense of how DOE is doing and how it looks against what is already on the record, so that in October or November, the CAB can provide input into those areas that it believes should be adjusted from the current year to the next year. She said this way when the CAB gets the draft submittal, as Mr. Williams said, it would be submitted to the CAB at the same time it would be submitted to the regulators, so the CAB would have had some advance information on how DOE has progressed.

Mr. Williams stated that if the CAB was able to review the document before the regulators got it, it would put the regulators in a peculiar situation with the CAB.

Cate Alexander, DOE-HQ, said she was getting a little uncomfortable and thought a lot about whether to say anything, but she wanted to because this is the subcommittee's recommendation and no federal input should be given on whether the subcommittee should make this recommendation—outside of information that might affect what they decide to put forth. She stated negotiations on response should not take place beforehand, the CAB is giving input to DOE, and that is what is important. She continued that from a Board member's perspective, timeliness is of utmost importance in terms of their satisfaction that they have been heard and they have input.

Shelly Wilson, SCDHEC, said in terms of the process for moving forward, she would like to echo what Ms. Belencan said.

CAB member Jayaraman said he thought it was unfair to ask DOE to submit revisions that would be of interest to the public only. He said it is not that the CAB wants only the interesting information-it wants all relevant information. He discussed some changes that could be made to the recommendation.

CAB member Parson said she would get with the FD&SR Committee and work on any proposed changes.

**COMMITTEE UPDATE: Strategic & Legacy Management (S&LM) Committee-  
Jerry Wadley, S&LM Committee Chair**

CAB member Jerry Wadley summarized the last committee meeting and said the Committee has two recommendations open, 262 and 272, and one closed recommendation, 277.

He announced the next S&LM Committee meeting and said it would be preceded by the tour of H Canyon, HB-Line, and L Basin. He encouraged all members of the Board to participate in this tour.

**COMMITTEE UPDATE: Nuclear Materials (NM) Committee-  
Rose Hayes, NM Committee Chair**

CAB member Hayes said the NM Committee has a number of open recommendations, including 263, 266, and 267. She said the NM Committee shares 263 with the Waste Management Committee. She stated her committee also has two pending recommendations, which includes 275 and 276 and has received responses from DOE.

She stated the committee has three new recommendations to be discussed that day: Concern for Receipt and Planning for Disposition of Spent Nuclear Fuel at SRS; Disposition Costs for SRS Research Reactor Spent Nuclear Fuel; and Impact of Blue Ribbon Commission Recommendations on SRS Programs.

CAB member Hayes noted that there were 24 topics in the committee's work plan, and stated the committee has covered approximately 14 of them.

**Recommendation Discussions**

**Draft Recommendation: Concern for Receipt and Planning for Disposition of Spent Nuclear Fuel at SRS**

CAB member Hayes reviewed the recommendation and opened the floor for comments.

CAB member Jayaraman said he was shocked because the background reads that the CAB supports the receipt of spent nuclear fuel from anywhere in the world and also from other states. He said he doesn't know if that is a good thing from South Carolina's and the public's point-of-view. He said he doesn't know whether the public or the CAB is more inconsistent and disjointed because at the end in the recommendation the CAB writes there is no planned disposition path at all. He said the whole concept of approach is questionable for the recommendation titled, "Concern for Receipt and Planning for Disposition of Spent Nuclear Fuel at SRS."

Shelly Wilson, SCDHEC, stated she was hesitant to weigh in since SCDHEC has no regulatory authority over storage of spent fuel. She said she is struggling like CAB member Jayaraman to understand the intent of the recommendation. She continued that in the background section, some of the statements do appear to be a little generous and a little bit too eager to receive spent fuel from other sources outside of Savannah River Site. She said one sentence reads that it has been a very successful program and was cited as such in the recent draft Blue Ribbon Committee report. She said she has read over that report, and didn't remember it citing a successful program with regard to receipt of spent fuel at Savannah River. She said her overall suggestion is that perhaps the CAB may want to consider some of the generosity of the statements in terms of how they might be conveyed by others.

CAB member Hayes corrected stating it isn't spent nuclear fuel in general, but foreign and domestic research reactor fuel. She said this addresses the spent nuclear fuel from foreign and domestic research reactors, which not only the

U.S. Government, but the State of South Carolina agreed to. She continued by stating the problem is that in the agreement there was to be a disposition path; she said this is what the CAB is asking for.

#### **Draft Recommendation: Disposition Costs for SRS Research Spent Nuclear Fuel**

CAB member Burke reviewed the recommendation and gave highlights. He said SRS has been receiving wastes since 1960 and is going to continue to receive materials until at least 2019. He said this is an ongoing program; not something that is planned around whatever the status of the H Canyon is going to be next year. He continued that there is a referral to 15,000 items of spent nuclear fuel in the L-Reactor Basin. He said the CAB is concerned with whether SRS is making short-term cost decisions that, in the long-term, will be more costly and will create additional problems.

CAB member Jayaraman said his comments earlier have bearing on this recommendation as well because it also talks about storing nuclear fuel at SRS. He said this recommendation gives out three options and then asks DOE to come up with costing the three options. He said the CAB does give technical options for SRS to come up with cost options. He said if the CAB is interested in that, then it should ask the SRS experts to come up with options on how it could be done, and then, along with that, the cost options.

CAB member Stan Howard said he thought the intent of this recommendation is to let the public know what is being done with their tax dollars. He said what the CAB is asking for is an explanation or a plan of what DOE is going to do.

CAB member Burke said the CAB is looking at whether the long-term system costs of storage, presumably without an H Canyon option, has been thought through and what those costs will be versus continuing to process the material now.

#### **Draft Recommendation: Impact of Blue Ribbon Commission (BRC) Recommendations on SRS Programs**

CAB member John Snedeker introduced a paper he wrote that discusses the background of the BRC and how much of an impact it is going to have; he reviewed his paper. He said the draft recommendation the CAB had on the table did not adequately respond to the BRC report. He said it is not sufficient to be told when SRS expects to be able to assess the impacts on the SRS operations. He continued that the CAB needs to know in specific detail how DOE and SRS management intends to implement the recommendations, most particularly that which calls for a new single purpose organization to develop and implement a focused, integrated program for the transportation, storage, and disposal of nuclear waste.

He said he would add a recommendation that would be a stand-alone that is to involve the nuclear power industry more intimately in CAB proceedings. He said he didn't believe the CAB has ever heard a spokesperson from Southern Nuclear or any of the other reactor developers.

He said the BRC invited comments on its draft report that can be submitted either by mail or to its website and there will be a public meeting in Atlanta, Georgia, on October 18, 2011, to receive those comments. CAB member Hayes asked CAB member Snedeker to summarize the recommendation that was before the committee which have to be confined to programs specific to SRS. CAB member Snedeker said the only thing he would add to the recommendation is to put in the statement as to how the recommendations of the BRC will be integrated into the program plans. He gave wording and directions for these changes. CAB member Jayaraman said he thought this recommendation was very timely and specific.

Dennis Bickford, Public, said it was his understanding that the receipt of the offsite fuel was predicated on the premise that it would be reprocessed at SRS and essentially rendered inert or safe. He said he didn't note any question there with respect to if the time is extended. He asked if that includes an increased risk to the inhabitants in the environment by extending that, particularly if it is stored in water. He said, from a legalistic citizen's standpoint, it seems that the State agreed to receive this material based on the premise that it would be processed at SRS and that would include employment. He said both the safety and the finance need to be considered.

Rose Hayes asked if there was someone who could speak to Dennis Bickford's question about dispositioning. Pat McGuire, DOE-SR, said regarding the receipt and storage of the foreign and domestic research reactor fuel, that the program is continuing. He said H Canyon is not shutting down, and is still in a high state of readiness. He said it will be maintained in this state of readiness and, while the BRC is developing its final report, it does not preclude H Canyon to be used for dispositioning spent nuclear fuel in the future. He stated that DOE is also looking at possibly dispositioning some of the more vulnerable fuel. He said they are continuing to look at various options and alternatives but, as the CAB said in several of its recommendations, the importance of continuing to receive the foreign and domestic research reactor fuel is of national importance. He added that L Area is a very secure area. He said, in regard to the used nuclear fuel, DOE is committed to eventually disposition that material. He explained that the BRC is playing a role in that and, therefore, EM is not going to look in advance or prejudge what the BRC may or may not say, but H Canyon will be available if that decision is made to use that facility to disposition the material. He added that DOE is looking at different options and alternatives, but the material is safely and securely stored. He continued that they are still to receiving material, but have done the analysis that has evaluated storage of that material through at least 2019, and the additional risk to the workers, the public, and the environment is very small. He said the facility is very secure, the water chemistry in the storage basin is well maintained, and SRS recently did a study that is indicating that the material could be stored very safely for an additional 50 years if that was necessary; he added that he didn't think it is in the plans of DOE to continuously store it for that significant period of time. He said they do play a very key role from a National Priority perspective to safely receive that material for nonproliferation reasons so that it does not get into terrorist hands. He said they are very well aware that the State of South Carolina, does not want to have that residing forever and DOE is working with Washington, DC, and the BRC to find the most effective disposition option.

CAB member Hayes asked where some of the foreign reactor receipts are coming from with respect for our concern for proliferation and terrorism. Pat McGuire, DOE-SR, said some of them most recently came from South Africa, Chile, and Australia. He said some may ask, what is the big deal because these are pretty friendly countries but you one never knows what is going on.

CAB member Hayes said it was her understanding that originally the U.S. loaned out plutonium for research with the agreement that it would be returned when the research efforts were concluded. Pat McGuire, DOE-SR, said that was correct. He continued by stating the majority of that material is U.S. origin material and when the program was initiated to develop nuclear power, various countries used it for research with the agreement that DOE would be bringing it back to this country. He said this is exactly what DOE is doing, honoring its commitments.

CAB member Hayes stated that the committee had concluded its business, and announced when then next NM Committee meeting would take place.

**COMMITTEE UPDATE: Waste Management Committee  
Emile Bernard, Committee Chair**

CAB member Burke, who is co-Vice Chair for the WM Committee, filled in for Emile Bernard, WM Chair. CAB member Burke said the WM Committee did not have any recommendations to discuss, but would like to bring up a couple of issues. He said at the last Full Board Meeting, the WM Committee submitted the Waste Matrix recommendation. He said they are waiting for a response and hope to hear something soon. He reviewed the last WM Committee meeting.

WM co-Vice Chair, Stan Howard, reported that the next WM Committee meeting will be October 18, 2011, at 6:00 p.m. at the DOE Meeting Center. He stated the WM Committee currently has six open recommendations: 246, 258, 263, 269, 270, and 274, and one pending recommendation, 278.

**COMMITTEE UPDATE: Administrative Committee-  
Kathe Golden, Administrative Committee Chair**

Administrative Committee co-Vice Chair, Denise Long, reported on behalf of Kathe Golden who was absent. CAB member Long asked everyone to make note that slides are still being printed on both sides to help save money and resources. She listed the CAB's new, shorter web address: [cab.srs.gov](http://cab.srs.gov)

She asked everyone to read and be prepared for discussion of the CAB Internal Processes at the Education and Process Session (EPS).

She said for membership, the campaign has ended with a total of 21 new applicants and five re-appointment applicants for a total of 26 applications. She encouraged all CAB members to solicit new members for the CAB within their communities. She said the Administrative Committee is trying to get started on a CD which would have information about the CAB and asked for suggestions; she provided a brief overview of what the CD may include. She reminded all members to use the Live Meeting options for committee meetings if they cannot attend in person.

### **Public Comments**

Tom Clements, Friends of the Earth, said he appreciated Ms. Alexander attending and presenting at the meeting. He said he thinks it is important to have some comments from DOE-HQ about how this particular CAB does its business. He said he appreciates everything the CAB does and the information that comes out in the meetings.

He said he thought it was interesting to hear from Ms. Alexander about how the advisory boards should strive for independence from DOE and about how communication should be accomplished. He said it was his impression that the CAB needs to hear more about that from DOE-HQ. He also said he thought it was interesting about the status of the committee meetings and that they might have to be noticed in the Federal Register. He said he has noticed the CAB has done a much better job of communicating about the committee meetings particularly with the web broadcasts, which he has not participated in yet. He said he thinks the CAB needs to get some direction about what kind of recommendations or advice it can give to other agencies outside of the office of EM.

He said he thinks the CAB needs to focus on EM and not so much on what the BRC is doing. He said as far as the spent nuclear fuel at the site, which is highly enriched uranium fuel, not plutonium, it is only 0.005% of the amount of spent nuclear fuel that the BRC is addressing. He stated he is not sure why the CAB would want to get involved into what has become heavy politics around the H Canyon.

He pointed out that DOE has been using terminology to call spent nuclear fuel “used nuclear fuel.” He read a response he received dated August 29, from Ben McCray, Assistant General Counsel, Office of General Counsel, concerning use of this extra legal term where the legally defined term is spent nuclear fuel.

He said he doesn't know what the basis is for an agency choosing an alternative term, but DOE has chosen an alternative term. He said he appreciates that the CAB, which is a FACA committee, has not chosen some alternative term. He said use of the alternative term “used fuel” is one way of representing the potential that such fuel may have value in the future. He stated that the use of that term, in his opinion, is a politically motivated way to support reprocessing the spent nuclear fuel, which is a very costly and problematic issue.

**~Meeting Adjourned**

**Meeting Minutes**  
**SRS Citizens Advisory Board – Full Board Meeting**  
**Charleston, South Carolina**  
**September 27, 2011**

**CAB**  
Thomas Barnes  
Dr. Emile Bernard-*Absent*  
Dr. Donald N. Bridges  
Edward Burke  
Louie Chavis-*Absent*  
Mary Davis-*Absent*  
Kathe Golden-*Absent*  
Judy Greene-McLeod  
Dr. Rose Hayes  
Stanley Howard  
Dr. Kuppuswamy Jayaraman  
Travis Johnson  
Cleveland Latimore  
Denise Long  
Clinton Nangle  
Dr. Marolyn Parson  
Harold Simon  
John Snedeker  
George Snyder  
Skyye Vereen  
Dr. Gerald Wadley  
Sarah Watson  
Alex Williams

**Agency Liaisons/Regulators**  
David Williams, EPA  
Kyle Bryant, EPA-R4  
Diedre Lloyd, EPA-R4  
Heather Cathcart, SCDHEC  
Van Keisler, SCDHEC  
Kim Newell, SCDHEC  
Shelly Wilson, SCDHEC

**Contractors**  
John Gadd, Jacobs  
Bill Bates, SRNS  
John Cook, SRNS  
Jeannette Hyatt, SRNS  
Paaul Sauerborn, SRNS  
Nancy Bethurem, SRR  
Ginger Dickert, SRR  
T. F. England, SRR  
Kristin Major, Techlaw  
Jenny Freeman, V3  
James Tanner, V3  
Eddie Watson, V3  
Ashley Whitaker, V3  
Erica Williams, V3

**DOE/Other**  
Cate Alexander, DOE-HQ  
Helen Belencan, DOE  
Becky Craft, DOE-SR  
Gerri Flemming, DOE-SR  
Allen Gunter, DOE-SR  
Brian Hennessey, DOE-SR  
Doug Hintze, DOE-SR  
Pat McGuire, DOE-SR  
David Hoel, DOE-SR  
Rich Olsen, DOE-SR  
Jean Ridley, DOE-SR  
Terry Spears, DOE-SR  
Amanda Watson, DOE-SR  
Wade Whitaker, DOE-SR

**Stakeholders**  
Dennis Bickford  
Tom Clements, Friends of the  
Earth  
A.M.N. Howard

CAB member Alex Williams led the Board in the Pledge of Allegiance, and Jenny Freeman, CAB Facilitator, welcomed everyone to the meeting and reviewed the ground rules for the meeting and reviewed the day’s agenda. Ms. Freeman then introduced Donald Bridges, CAB Chair.

**APPROVAL OF MINUTES**

CAB Chair Bridges facilitated the approval of the minutes from the July 2011 Full Board meeting.

**CAB CHAIR UPDATE**

CAB Chair Bridges welcomed everyone, and extended a special welcome to Cate Alexander, Designated Federal Officer over the Site Specific Advisory Board, DOE-HQ. He said since the last full CAB meeting, the CAB has had four committee meetings. He then shared information on the Site Specific Advisory Boards (SSABs), stating the CAB is one of eight Boards under the SSAB. He summarized a Chairs’ conference call he attended on Sept. 19, stating there is still a great deal of uncertainty concerning the budget.

He reviewed the topics discussed at the meeting held the day before and stated there would be a Blue Ribbon Commission meeting in Atlanta on October 18. He stated that in reference to Waste Management (WM) Conference 2012, he has received no interest from anyone on providing a paper, so he submitted an abstract on “Finding the Public Voice, A Few Observations after Experience on the SRS Citizens Advisory Board.” He said he plans to present that paper at the next WM conference. He stated that the CAB has the “Education and Process Session (EPS)” that will be coming up in just a couple of weeks. He encouraged all CAB members to give thoughtful feedback. He then reminded everyone that there would be a tour of H-Canyon and L-Reactor on October 25, as well

as two committee meetings for Facilities Disposition & Site Remediation and Strategic & Legacy Management. He then stated an Environmental Justice Community Workshop was scheduled for September 29, in the Barnwell County Library, and encouraged CAB members to attend.

## **AGENCY UPDATES**

### **Dr. David Moody, DOE Savannah River Site Operations Manager**

Dr. Moody recognized Cate Alexander, DFO, DOE-HQ; two local DOE Deputy DFOs, Doug Hintze and Pat McGuire; and Gerri Flemming, CAB Federal Coordinator, and thanked them for their commitment to the CAB and the recognition of the important work that the CAB does. He expressed appreciation to the CAB and stated that this work was important to him because the CAB is a major part of DOE's connection to the communities and to the public. He noted also his appreciation for the dialogue that Cate Alexander had with the CAB about some of the goals for getting more public participation even at these meetings.

He spoke about the Savannah River Site Strategic Plan and Enterprise SRS. He said he hoped everyone had reviewed the plan and Strategic Vision, stating DOE received more than 250 comments on the draft, including some CAB members. He stated DOE incorporated as many comments as they could, and one of those comments was why not combine the two, the Strategic Plan and the Vision, and this was done. He said final documents will be rolled out at the end of that week at the P&R Reactor Celebration. He then reviewed what would happen at the P&R Reactor Celebration, highlighting scheduled special attendees.

### **Gary Flowers, Savannah River Nuclear Solutions (SRNS)**

Mr. Flowers expressed his appreciation for the CAB's support for the two years he has been at SRS. He stated that his last day as President and CEO of Savannah River Nuclear Solutions would be Friday, September 30, and introduced his replacement, Dwayne Wilson. He stated that prior to this assignment, Dwayne Wilson was running a \$6 billion per year industry mining manufacturing life sciences for Fluor and was living in Greenville, South Carolina.

Mr. Flowers stated he would be staying engaged with the National Laboratory, which is one of the focal points for the driving the success of Enterprise SRS.

He stated the team that has been leading SRNS over the last two years has accomplished quite a bit; he reviewed these accomplishments, highlighting on ARRA funding, transuranic waste, area closures, and funding for H-Canyon. He said he believes H-Canyon is a very valuable asset for the future of the nation and for the future of the state of South Carolina. He thanked the CAB again for its input and support.

### **Doug Hintze, DOE-SR**

Mr. Hintze said the Site had a goal of 75 percent footprint reduction and it is currently at 70 percent. He stated another important project at SRS is the Biomass Cogeneration Facility. He said the facility will be completed and will go operational by the end of 2011. He then spoke briefly about the budget.

He said, in reference to operations, high level waste canister 263 came out the previous day, which is a new record for SRS; he said by the end of the year, it should be somewhere around 266 canisters. He then reviewed some information on the Saltstone Facility.

He said the low enriched uranium blend-down, which is sent off for use at the Tennessee Valley Authority, continues and will complete in December 2011. He said by the end of February 2012, there will be a flushing of the H-Canyon, and after that H-Canyon will continue to receive laboratory samples and it will also do proficiency runs to make sure that the equipment is maintained. He said this does not prevent or eliminate any potential future missions.

#### **David Williams, EPA Region 4**

Mr. Williams said it was the end of the fiscal year, and he reported on all of EPA's accomplishments. He said accumulatively the targets and measures for the Savannah River Site were more than 30 or 40 percent of all the achievements for the region and probably got close to 20 percent for the entire country for EPA programs on National Priority List sites. He reviewed some of these accomplishments.

He stated the EPA has had a "rotating door" with Regional Program Managers as of late. He said they just lost Jonathan Walsh, who was at the last CAB Meeting. Mr. Williams said Mr. Walsh was working on the WIPP project and is back in Washington, DC. He introduced Diedre Lloyd, who he said will be a permanent RPM with EPA working 100 percent on the Savannah River Site. He invited the CAB members to attend the Environmental Justice Community Workshop in Barnwell, which would be held on September 29. Kyle Bryant, EPA Region 4 Community Involvement Coordinator, gave more details on the EJ meeting.

Mr. Williams spoke briefly on the Superfund Job Training Initiative (SJTI). He said the EPA would be in attendance at the P&R Ceremony at SRS, and that the ceremony marks the final closure and cleanup of the P&R reactors under CERCLA and is a major milestone for DOE, EPA, and DHEC.

#### **Shelly Wilson, South Carolina Department of Health and Environmental Control (SCDHEC)**

Ms. Wilson spoke of the massive footprint reduction at the Site and the accompanying soil and groundwater cleanup. She said 75 percent footprint reduction is "tremendous." She said, for SCDHEC, the Biomass Facility is a good example of federal leadership in the area of "clean energy." She stated the Biomass Facility at SRS will help to further clean the air in the central Savannah River region. She said SCDHEC places a lot of focus on treatment of High Level Waste (HLW) and closure of HLW tanks. She explained that SCDHEC did concur with bulk waste removal for Tank 7 on August 20, 2011. She said another "significant step forward" is that SCDHEC has been looking at the closure module for the next two tanks, Tanks 18 and 19. She said the milestone for closure of those two tanks is December 2012. She said SCDHEC issued its last set of comments on the closure module at the end of August 2011, and in the next few weeks, a Public Notice will come out for review and comments on the closure mode for those two tanks. She said a notable milestone is that all the HLW will be treated by 2028.

Ms. Wilson introduced Mr. Van Keisler, SCDHEC, for an update on soil and groundwater.

Mr. Keisler covered accomplishments by the FFA section since the last full CAB Meeting in July; he said SCDHEC has had nine meetings or site visits during that timeframe. He reviewed the nine meetings held. He then stated that during the same timeframe, SCDHEC had nine major document reviews; he listed those documents. He stated that SCDHEC completed the Spatial Toxicological Deer Study, which was performed for the SRS site.

### **PUBLIC COMMENTS**

Tom Clements, Friends of the Earth, discussed the Community Involvement Plan. He said he agrees that there is concern that there is not enough public involvement in SRS issues or meetings. He said he has spoken five times in the last four to five months on SRS; specifically to groups in Georgia and South Carolina, with a number of these being chapters of the Sierra Club. He said the Georgia Sierra Club Retreat would be coming up that weekend and he would be giving a presentation about the SRS at that Retreat. He said interest has risen because of the Blue Ribbon Commission and because of things in the Strategic Plan that imply new nuclear waste coming into South Carolina, which is probably the biggest motivator for concern out there. He stated that in a couple of weeks, an entity which the CAB should be aware of, called the Conservation Community, which is a coalition of the conservation and environmental groups state-wide in South Carolina, is having their planning session and there will also be an update to that entity on SRS. He said that group has strong lobbying presence in the state legislature and the largest group of the conservation voters of South Carolina—Coastal Conservation League, Sierra Club, South Carolina Wildlife Federation, and a host of other groups with membership of about 50,000 people state-wide. He said they have become concerned about the increased waste coming into South Carolina, and they want to get it on their agenda. He said there is an "upswing" in interest in SRS issues that the CAB can take advantage of. Mr. Clements said he also

spoke to a state-wide assembly of environmental leaders from campuses around the state of South Carolina before the summer break and will be speaking to a group of students at the University of South Carolina on October 4.

**COMMITTEE UPDATE: Waste Management (WM) Committee-  
Emile Bernard, WM Chair**

Ed Burke, standing in for Committee Chair Emile Bernard, reported that the next meeting for the Waste Management Committee would be October 18, 2011. He then introduced the speaker, Jean Ridley.

**PRESENTATION: Defense Waste Processing Facility (DWPF) Process Improvements & Tank 13  
Modifications – Jean M. Ridley, DOE-SR**

Ms. Ridley stated on the liquid waste side, the project had approximately \$200 million to do 41 activities in the liquid waste facilities, which included the Defense Waste Processing Facility (DWPF), the Tank Farms, the Effluent Treatment Facility, the Saltstone Facility, as well as a wide variety of projects within liquid waste. She stated 99 percent of the projects are physically complete. She said they accomplished their goal under the American Recovery and Reinvestment Act, and have only four pumps that are late in delivery to complete all of the ARRA Work.

CAB Chair Bridges asked if the project used a lot of money for spare parts. Ms. Ridley said, no, they did a lot of process modifications to tanks. She said they bought new pumps, not replacement pumps, because some of the tanks did not have transfer pumps in order to move the sludge, and added some new storage tanks in order to improve processes.

Regarding the DWPF process improvements, Ms. Ridley stated there are two main cells at the DWPF. She said the chemical process cell has three tanks in it—the Sludge Receipt and Adjustment Tank (SRAT), the Slurry Mix Evaporator Tank (SME), and the Melter Feed Tank (MFT). She continued that the melt cell has the Melter in it.

She said, in the past, a limiting factor was the Melter. She said they could only melt at a certain rate to produce so many cans and that was running around 200 cans a year. She stated by adding the Bubblers to the Melters, DOE was able to speed up that time. She said they have increased the efficiency of the Melter to make it faster, but now have to go back to the front end to increase that time so they get it to a one to one ration; she said they can get it mixed up and fed as quickly as they produce the cans. She said was aware that the CAB has had several presentations on the Bubblers and she gave an update on the Bubbler status and process.

Regarding the tanks, the first one is the SRAT. She said they currently add formic acid to strip out the mercury and reduce the magnesium to a more elemental state. She stated the process improvement is to replace that formic acid with a glycolic acid or a combination thereof. She said if they substitute glycolic, the chemical reaction is quicker and it takes less time to evaporate the liquid. She explained for that process, the studies and testing has been performed, but it will probably be two more years before it can be implemented.

Ms. Ridley stated that the next tank is the Slurry Mix Evaporator (SME); this is where they add the Frit. She said they currently add Frit in a slurry form, which is water mixed with the Frit, in order to transfer it into the tank. She commented that it takes time to boil that water off to concentrate the material back down; the process improvement is to change that to a dry Frit and get rid of the water. She said that will reduce the evaporation time, as well as the total process between the SRAT and SME. She said if they reduce part of that evaporation period, it will lower the cycle time and align closer to how quickly the Melter can accept the material. She said they have a vendor who is ready to put this into place.

CAB member Hayes asked if dry Frit is comparable to cake flour that one can just buy anywhere. Ms. Ridley answered yes, the Frit is manufactured as little glass beads. She said there are multiple vendors who make it, but dry Frit can be purchased anywhere. CAB member Hayes asked if it was form of pulverized glass. Ms. Ridley said yes, it looks like fine sand. She said, currently, the process mixes the frit with water and feeds it into the SME, but what this process improvement does is get rid of the water aspect and just feeds it dry.

Ms. Ridley stated that the next process improvement was probably the simplest one. She explained that in the chemical process cell, there is another tank called the Strip Effluent Feed Tank (SEFT). She said the strip effluent is

the cesium product they strip off from salt and that cesium is fed into the sludge. She explained that they can only feed directly to the SRAT and are adding jumper, and controls, in order to also be able to feed it to the SME. She said that allows an ability to be able to balance out those cycle times.

CAB member Bridges asked if there is an advantage of going to one tank or the other. Ms. Ridley said there is not really an advantage. It was only sent to the SRAT because it was thought the chemical adjustments were easier there, but the SME has always had the capability to do chemical adjustments as well. She said being able to provide the capability to add it to the SME allows the flexibility to balance those cycle times between the two tanks.

She continued with her presentation by reviewing the process of a Decon Slurry Frit. She stated after a canister is filled, it would be taken to the decontamination chamber to wash the outside. She said that water, and the Frit combination that is used to wash the canister, is cycled back into this SME; she stated this process improvement will remove that water. She continued that the technology is called a “hydrocyclone,” and it basically just spins the material and separates the Frit from the water. She added that the water would then be tanked over to the effluent treatment facility, treated, and disposed of. She said all of the process improvements are planned to be in place before the startup of the Salt Waste Processing Facility.

CAB Chair Bridges asked about the most promising feature that has not yet been fully developed. She said, to her knowledge, these are the only process improvements that she is aware of at this magnitude, but there may be smaller ones.

CAB member Denise Long said she knows that Ms. Ridley is saying that these processes should be ready before SWPF comes online. She asked if they would be prepared to have everything ready if it was pushed ahead one year. Ms. Ridley said the intent is to install these process improvements at the same they shut down DWPF to tie in SWPF. She said it is more of a coordination effort than it is trying to get them done early. She said they want to only try to install them during planned outages. She said if they could get funding, and could complete them early and during a planned outage, they could go ahead and install.

Ms. Ridley continued by stating that Tank 13, in H Tank Farm, holds roughly a million gallons and is important because in the future they plan to use that tank as a transfer path for two other tanks. She said all of this was done with ARRA funds in the last two years and it is completed. She reviewed other related tasks that were completed, and then presented a sketch of the work done in Tank 13.

CAB member Burke asked if they will be using Tank 13 as a transfer path for Tanks 14 and 15. Ms. Ridley said after they remove the sludge out of Tank 13 in sludge batch 8, it will be ready to be used as a transfer tank. CAB member Burke asked if they were actually going through Tank 13 and if that would re-contaminate the tank. Ms. Ridley said it won't be removed to the level that it is decontaminated, and there will still be sludge in the bottom. She said that tank is not to the point that it would be considered clean by no means.

She continued by stating they had three submersible pumps; she referenced photos. She then showed where they removed the existing equipment, referencing other photos.

CAB Chair Bridges asked if they are going to have to do the same process for every tank.

Ms. Ridley said yes, on some tanks, because the tanks were used to store waste, they were not planned to be used to remove waste. She said in order to clean them out, they will have to put in transfer pumps and mixer pumps, blend pumps, etc., in order to get that waste out of those tanks.

Mr. Terry Spears, DOE-SR, agreed with Ms. Ridley's answer. He said in terms of the type of in-tank equipment used for making those transfers, they will probably have to do that for each tank. He said they are going to try to reuse as many of those pumps as possible, decontaminate them, and move them rather than continuing to buy them. He said Tank 13 was specific to F Tank Farm.

CAB member Hayes asked if the original plan was to permanently store the waste in those tanks. Mr. Spears asked if she meant the HLW tanks in general. CAB member Hayes said Ms. Ridley stated there was no plan to remove the waste from the tanks. She asked if that implies they were the permanent disposition method. Mr. Spears said what

they are seeing is an artifact of the Cold War. He said they were in the business of producing nuclear materials for defense, and the handling of the waste was something that was said to be figured out in the future. He stated as the canyons operated and produced nuclear material, they were able to use that for the weapons. He continued that in the meantime, they safely stored the waste, anticipating the technology and the engineering acumen necessary to deal with its removal, treatment, and disposal. He explained that DOE has shifted its focus.

Jean Ridley continued reporting on Tank 13, highlighting on some infrastructure improvements. She presented a graphical analysis to show the perspective of how large the project was. She pointed out the electrical substation and the electrical equipment skid. She pointed out other equipment in the graphic.

CAB Chair Bridges asked when DOE is finished, what it will do to the site. He asked if they will cover it up with concrete or dirt. She stated her understanding is that they will remove the waste, clean the tanks out, get approval by DHEC and EPA to grout the tanks, and then put a closure cap, or something, over the top.

Wade Whitaker, DOE-SR, further explained that under CERCLA, they will place a large earthen cap over the top. He continued that it is not for the protection of the tanks- it is that in between the tanks they have had releases and spills and there are some spills around in the area. He said instead of risking the health of workers going in and digging in between these tanks, they will cover it.

In conclusion, Jean Ridley stated that these two activities were done under ARRA, and it was very successful.

**COMMITTEE UPDATE: Facilities Disposition and Site Remediation (FD&SR) Committee-  
Marolyn Parson, FD&SR Chair**

CAB member Parson stated the next FD&SR Committee meeting would be October 25, 2011, from 6:00 p.m. to 7:30 p.m. She then introduced the presenter, Brian Hennessey, DOE-SR.

**PRESENTATION: SRS Federal Facility Agreement Community Involvement Plan (CIP) –  
Brian Hennessey, DOE-SR**

Brian Hennessey introduced himself as the Federal Facility Agreement (FFA) Project Manager for the Department of Energy (DOE). He stated the purpose of his presentation, and outlined what he would be discussing.

He said the reason DOE has a CIP is to show compliance with the public involvement requirements of the laws and regulations governing the cleanup of SRS; he reviewed these laws and regulations. He said the CIP was created to ensure that residents were continuously informed about site cleanup and encouraged and given opportunities to be involved. He explained that the CIP is not the comprehensive plan for all public outreach activities at SRS. He stated that EPA guidance on the CIP preparation came out in September 2002; he listed some of the EPA's primary concerns. He said the first CIP was issued in 1996, and then outlined what the plan includes. He stated there is an overview of the history of the community involvement at the site. He reviewed the Appendices, and explained what each section covered.

Mr. Hennessey spoke about reading rooms where the CIP and other related documents are available for review. CAB member Travis Johnson asked if there was a reason that South Carolina State was not on the reading room list. Mr. Hennessey said there is no reason that he was aware of. He said they are only required to maintain a complete Administrative Record file copy at SRS and at USC-Aiken. He said they maintain a couple of others that are not required.

CAB Chair Bridges asked if they have a sense for the extent these reading rooms and this documentation is read and utilized. Mr. Hennessey said he did not know. He said he was not sure that the reading rooms keep track of that.

CAB member Parson commented about the difficulty people experience getting information from web pages. She said the University of South Carolina Library's web page shows a link to the reading room. She said on that link there is an electronic copy of the title of the Administrative Record. She continued that on the library's web page, one can talk to an online librarian. She said she typed in a question for the library, asking them, "Do you have a record of how many people had accessed information in that reading room?" She said within 15 minutes she had a

response back from the librarian that they did not. She said she was a little surprised that the Administrative Record is not available electronically, but there are 17,000 records.

Mr. Hennessey said what CAB member Parson saw online was the Index to the Administrative Record file. He said the database itself would be enormous and way too much to have online. He said the Reading Rooms at Savannah State and Augusta State, in addition to having the current documents that are available for review and comment, also maintain that Index so that if one wanted to see a document, one could find out the Administrative Record File (ARF) number of that and then get that document at one of the repositories where the whole ARF is kept, either at USC-Aiken or USC-Columbia.

Mr. Hennessey continued that he has copied a list out of the CIP of specific activities or types of activities that will occur over the next three years; he listed and reviewed these items. CAB member Hayes asked if any of these activities informed the public that the CAB exists. Mr. Hennessey said he is certain that they have. Gerri Flemming, CAB Lead Federal Coordinator and DOE-SR, said she could not definitely say “yes,” but could check with the people who coordinate those activities. Becky Craft, DOE-SR, said she is the Director of External Affairs for the DOE-SR. She reviewed some of the public outreach activities that are held and stated they always make sure the public knows about the SRS CAB. CAB member Hayes stated she was thinking that it was a perfect conduit to set the stage for interaction between the CAB and the community. Mr. Hennessey asked whether the CAB promotes its own mission and existence in the community.

Mr. Hennessey then overviewed the preparing and issuing of a Responsiveness Summary, as well as the Environmental Justice Program. He reviewed a few Community Involvement activities that recently occurred and spoke about mini grants, which are provided for teaching initiatives, and of the Science and Engineering Fair. He concluded by stating the SRS CIP includes public involvement activities that are required by cleanup statutes, including RCRA and CERCLA, but also goes far beyond those to talk about other aspects of our Community Outreach.

CAB member Parson stated, referring to page 11 of the CIP that, there is a section called “Key Community Concerns,” and it starts off by saying, “over the years the CAB has been the primary forum to respond to key community concerns about SRS.” She said the next paragraph reads, “the CAB has developed this list of concerns based on input from a variety of sources...,” and then lists what the CAB’s concerns are; it has five of them. She asked how that list was developed.

John Cook, SRNS, stated that most of those came from the annual report of the CAB.

#### **COMMITTEE UPDATE, CONTINUED: Facilities Disposition and Site Remediation Committee**

CAB member Parson, FD&SR Committee Chair, introduced consideration of the recommendation, “Federal Facility Agreement (FFA) Update Provided Annually.” She stated that everyone was provided a copy. She introduced CAB member Nangle to present the recommendation.

CAB member Nangle gave an overview of the recommendation. CAB member Parson solicited a motion to approve the recommendation. CAB member Burke moved that the CAB approve the recommendation, and CAB member Williams seconded the motion. The floor was opened for discussion, and the recommendation was approved with the majority vote.

#### **PUBLIC COMMENTS**

Dennis Bickford stated that he is a Charleston County, SC, resident but lived for a number of years in Aiken and was familiar with the site and its missions. He stated that everyone else in the rooms assumes that everyone knows what goes on around there. He said he was shocked when he moved down there to realize that even the professionals around did not know there was a SRS. He said in particular, people in the area are very supportive of economic development and things which support the state economy. He said if one did a poll of the local public, one would get very little certainty about what SRS is, or does, or what its continuing mission is, including what the risks are.

He said the word slides at the CAB meetings have very little interest to the public and people really have to be motivated to come to meetings. He said the kind of motivation they are going to get is from people that have either lived around the site, or worked there, and feel a responsibility, concern, or general support, or people who are fearful and concerned about job loss or health effects and will come here to rattle cages rather than trying to do some constructive thing. He said he was somewhat concerned that DOE seems to think the CAB should not be technically involved. He said he thinks technical background should carry equal weighting with some of the other criteria that was discussed. He said he thinks representatives need to be on the CAB from Allendale and places like it, including areas around Georgia. He said he thinks the DWPF Tank 13 presentation was the one that was most successful in trying to be capable of outreaching to the citizenry. He said he realizes the CAB has a lot of housekeeping in these meetings that is necessary for the committee to carry on its business, but if it really wants to do the outreach part, he thinks documents have to be focused in that direction, and basically DOE support has to be there to promulgate their distribution and maybe their development.

CAB member K. Jayaraman, representing the Public, stated that a few years back when CAB members used to stand and comment, he always thought it was ridiculous, but now he finds there are certain things he can say during public comment. He asked: “as a member of the public, what is the CAB doing to induce me to come and understand your meetings?” He said he can’t find anything. He said if he comes over to the meeting, as a community member, listening for a minute or for attending the morning sessions, the CAB won’t even give him lunch. He suggested alternatives for lunch and meeting facilities that may save money and include the public more.

***End of Public Comment Session***

**COMMITTEE UPDATE: Administrative Committee-  
Kathe Golden, Administrative Committee Chair**

CAB member Long stood in for Kathe Golden, Administrative Committee Chair. CAB member Long spoke about the presentations being printed two slides to a page, which she said is done to save money and resources. She listed the CAB’s new, shorter web address: cab.srs.gov

She asked all CAB members to prepare for the Education and Process Session, and instructed them to review the CAB Internal Processes. She then addressed the membership campaign, and stated the Administrative Committee has been given the task to pull together ideas for an informational CD. She asked if any members have ideas for these CDs. She addressed the topic of a Speakers Bureau, and invited comments on that as well. She then reviewed the Online Meetings, encouraging all CAB members to attend online for committee meetings; she reminded everyone that the SRS CAB is the only SSAB that has online meetings at this time and all CAB members should support it.

**COMMITTEE UPDATE: Strategic & Legacy Management (S&LM) Committee  
Jerry Wadley, S&LM Committee Chair**

CAB member Wadley, S&LM Chair, said the S&LM Committee closed one recommendation and still had two open. He announced when the next meeting would take place and spoke about the H-Canyon and L-Area Tour, scheduled for October 25.

**PRESENTATION: The Savannah River Site Strategic Plan – Doug Hintze, DOE-SR**

Mr. Hintze stated the final Strategic Plan was released the previous day to employees, so the CAB would be the first to get an external copy of the plan. He said the plan would be introduced on September 29, during the P&R Celebration.

He said the plan has been out for comments since around the end of May to the beginning of June, and closed for comments the first week of September. He said they had more than 50 replies with more than 250 comments. He said 37 replies were from Site employees, three CAB members and two former CAB members replied, and the rest of the replies were from the general public. He said they looked at all the comments although not every comment

was incorporated in the plan. He reviewed some of these comments, addressing each. He explained that the Strategic Plan and Enterprise SRS have been merged.

CAB member Harold Simon asked if the Enterprise SRS is the branding of SRS and if it has a Strategic Plan, which the CAB now has in its final form.

Mr. Hintze said the Enterprise SRS encompasses everything that is in this Strategic Plan. He said the Enterprise SRS is addressing the concepts and the initiatives that are in the Strategic Plan.

Mr. Hintze said in order to develop the Strategic Plan, a group was formed and they discussed the Site's core competencies. He said they talked about different things such as project management, nuclear materials processing, storing, and security. He stated they looked at all the things the site does, and from that were able to synthesize that the core competency is Nuclear Material expertise; and explained.

He said they then developed three different business segments. He commented that SRS has enduring missions, and is not a closure site; he said when they started out, there were four different missions, but looking at the site as a whole, they came up with three different segments—National Security, Environmental Stewardship, and the Clean Energy. He provided an overview of these three segments.

CAB member Hayes said one of the leading factors that left them with nuclear waste management problems is that there has been the separation of the production as nuclear weapons on one level and nuclear energy at the other. She said they have always been separated instead of being looked upon as one entity. She said they now call it “closing the cycle”, or the “back end”, but if it had never been separated out from the production end of it, they wouldn't have this back end problem now. She said if they take the Environmental Stewardship and Clean Energy approach, they are still ignoring the problem. She asked if there is any thinking in the future that there will be some energetic efforts to fuse those things.

Mr. Hintze said CAB member Hayes was correct. He said they have to go from cradle to grave, which includes the waste management. He said in these cases, one has to think about how they would deal with any of the waste that comes out of any these activities, and that is all going to be integrated. He said these are not separate areas, and he will show that it is all integrated.

Mr. Hintze then showed a graphic diagram, which he said was the vision. He then reviewed the different strategic initiatives, explaining each. He said each initiative is in the plan for future review.

CAB member Wadley asked if there was a go-to person assigned to each of the initiatives. Mr. Hintze said there would be. He said each area would have an “assigned champion.”

CAB member George Snyder asked if any of the strategic initiatives would need Congressional approval. Mr. Hintze said as they go forward with the next step of the execution plans, they would include those who work in National Environmental Policy Act compliance, as well as lawyers. As an additional response, Dr. Dave Moody, Site Manager, said no, there is nothing that specifically requires Congressional action.

CAB member Simon asked, based on the strategic initiative, has a feasibility study been conducted on the 12 initiatives. Mr. Hintze said that will be the next step as they go forward. He said they have a process for mission development.

CAB member Hayes asked if in the discussions of all of the future prospects, if the word “transmutation” came up. She then asked if it is considered plausible, could DOE partner with the foreign private industry. Mr. Hintze said they are just talking the “what” right now. He said they are trying make sure they are not limiting themselves at this point in time. He said with SRS being a federal site, and having a national security mission, it has to fit within the framework of the site as far as the missions that it has. He said transmutation might be an answer. He said those experts are up in the national lab, so that may be part of the answer for these different initiatives. He said he doesn't know what it is going to be at this point.

Dr. Dave Moody, Site Manager, said if one looks at the major initiatives and transmutation, they really require energy levels way beyond anything that they have outlined, and quite often they are accelerator-driven techniques. He said if one looks at transmutation as it has been pushed internationally, it is really being driven by very large physics accelerator facilities, but those are not really a part of the SRS initiative. He said it could be an option in the future. He said the Site is open to ideas and the strategic initiatives are not an exhaustive list. He said they have picked out the 12 initiatives they are going to hit initially and said they welcome discussions on transmutation and whether or not it would fit into that future realm.

CAB member Wadley stated one other concept that has been talked about in the past was a sort of a Nuclear Power Park concept, like maybe Georgia Power would come in and build a couple of reactors on the site and sort of export power wherever. He asked if that concept has been dealt with. Mr. Hintze said he's not sure if they've ever had a concept of a Nuclear Power Park that would sell energy even when they were talking about the Energy Park Concepts. He said they've really never talked about power leaving the Site. CAB member Wadley then asked about wind power. Mr. Hintze said that is in the plan.

Mr. Hintze summarized by restating SRS is not a Closure Site and is committed to excelling at its existing missions. He said they have to do those missions in an outstanding manner in order to expand.

CAB member Bridges asked if Mr. Hintze ever sees a time when parts of the Site would be opened up to the public just for visiting a natural wildlife habitat, as a sign of openness to the public. Mr. Hintze said that comes up a lot in talk about future missions-parts of the Site being signed over to different entities. He continued that one of the things they are very careful of is the impact on our existing missions. He said there are two things that are really significant in that regard-one is the regulatory cleanup strategies DOE has with SCDHEC and EPA. He said the other thing is when talking about the nuclear safety aspect-the safety basis for the different facilities. He said there are design basis accidents that could occur at an H-Canyon, and if they allow the public in closer to those facilities, then different things have to be done to ensure their safety. He said he thinks that all of their documentation shows they would not change the boundary of the Site.

CAB member Wadley thanked Dr. Moody and his staff for coming out with an "excellent document," and thanked Mr. Hintze for presenting it.

**COMMITTEE UPDATE: Nuclear Materials (NM) Committee-  
Rose Hayes, NM Chair**

CAB member Hayes provided an overview of what the NM Committee addresses, and stated the committee has a number of recommendations. She announced the next NM Committee meeting. She said they met the day prior and considered two pending recommendations-275 and 276. She said they closed 275 and suggested that 276 remain open. She then introduced two speakers.

**PRESENTATION: Plutonium Ship to Waste Isolation Pilot Plant (WIPP), HB-Line Mission –  
Allen Gunter, DOE-SR**

Mr. Gunter stated the Office of Environmental Management (EM) has the management responsibility to disposition approximately five metric tons of surplus non-pit plutonium. He explained non-pit plutonium, stating it is not in the form of nuclear weapon components. He said they have 5 metric tons that is not suitable as feed to the Mixed Oxide Fuel Fabrication Facility (MFFF) due to impurities, because of its physical form, or other reasons. He said there is an interim action that has been approved that allows them to disposition approximately 85 kg by blending down with an inert material to disposition to WIPP. He stated that in the past, they looked at many options for disposition of this material and described the latest path to be considered, and the issues involved.

He referred to a flow sheet. He said material is currently stored in K-area in a secure vault. He continued that the idea is to ship it to the HB-Line facility, where it will be unloaded and transported into a glovebox. He reviewed the process and stated, in the end, they will load it into TRUPAC-IIs, and it will be shipped to WIPP.

He said they have already begun processing material in HB Line the past week. He said they have not shipped any to E-Area and they anticipate at least one shipment going out the coming fiscal year. He explained that the reason they

are a little delayed is that they are concentrating on the legacy TRU waste that has been at the site, but they are try to make a shipment in 2011. He then referred to a photo of a glovebox line, and further referred to other processes in his presentation.

Mr. Gunter then discussed the project process, stating they are utilizing the existing facility. He said they have identified up to three lines, and one of the nice things about HB-Line is that it already has ventilation and the support systems. He said they will be blending the plutonium to <10 percent, and will be putting it with an inert material. He said they are in the demonstration phase, and are utilizing one of the gloveboxes. He said they are expecting the first shipment this fiscal year and have the interim action. He said once they get past that, they will have again up to three glovebox lines that does about 200 kg of plutonium per year.

He said Carlsbad is working with NRC to come up with a new POC that weighs a lot less, so it becomes more efficient, and is less costly. He said if they can go to the new POC, it reduces that down to about 370 shipments, which is a significant reduction.

CAB member Burke asked how much plutonium could be processed this way. He asked how many years are they looking at to work off that plutonium. Mr. Gunter said it depends on what they are running. He said if they are only doing 200 kg, they are only running one line, and it is 20 years. He said if they run three lines, it is about seven years. He said it is a matter of how much funding they receive. He stated that in FY-12 they have the funding in the program to do one line, but they are in the demonstration phase. He said they want to demonstrate it, show how they can do it, to show they can ship material out to WIPP, establish that pipeline, and then they will start looking at increasing the throughput. He continued that this is assuming the material they currently have is identified as non-MOXable. He said they are currently working with the MOX program to try to identify any material that potentially could go to MOX. He said then they will send it over there as potential feed going that direction.

**PRESENTATION: Plutonium Storage and Consolidation – Bill Bates, SRNS**

Mr. Bates reviewed the Plutonium (Pu) Consolidation Status, and said they expect to bring in some NNSA 3013s, which are the welded cans of Pu that will come in on an interim basis as a direct feed to MOX, once MOX starts up. He referred to a diagram of a 9975 drum.

He continued that as part of consolidation, they had to have storage built and the storage capacity to bring the material in. He stated the primary locations for storage of the material is in the K-Area Material Storage (KAMS) Area. He said KAMS is authorized to store plutonium in metal form or oxide form in the 3013 cans and in the 9975 drums. He continued that KAMS is very large and has the capacity to hold about 5,300 drums. He said they are getting fairly close to full capacity. He referred to a photo the former reactor process room in K-Area. He stated the second area where they store plutonium is the 910-B vault. He said it is a smaller working vault. He said they use it to store some miscellaneous materials, but it is used primarily for surveillance “daughters.” He then addressed the Purification Area Vault (PAV), which he said is a project that is not completed. He said they expect to come online and store 9975 drums sometime in the near future in FY-12. He then addressed 9101-B briefly, explaining it is a bit different.

He stated they have started and have nearly completed the K-Area Storage Expansion Project. He said they are expanding into a Purification Area Vault (PAV) and said it is directly adjacent to KAMS. He said the primary things they expect to store in the vault are additional 3013 surveillance daughters, and also those NNSA 3013s that will be coming in on an interim basis awaiting MOX startup so they can go straight to MOX. He referred to photos.

He said this project was originally estimated to be about \$32.5 million, and the current forecast is just under \$20 million. He stated that part of the safe storage of plutonium in the facility involved the surveillance program. He said what they receives in with the consolidation effort all comes in a welded 3013 can; that 3013 can, the design and surveillance, is mandated by the DOE 3013 standard. He said to comply with that standard, they have an Integrated Surveillance Plan (ISP) that is intended to ensure, by doing the surveillance activities on these cans, that they are safe for storage for up to 50 years. He added that doesn’t mean they intend to store them for 50 years, but that is the basis of the standard. He addressed the two primary elements of the ISP, which are Nondestructive Examination (NDE) and Destructive Examination (DE). He then referenced more photos.

He said there are three facets to NDE: Digital Radiography, Container Surveys, and Visual Inspection. He stated they have done 73 Destructive Examinations since 2007. He explained the process, outlining each step.

CAB member Hayes asked if they found several samples that had become contaminated what would they do about the rest of the batch. Mr. Bates said that really gets to the root of why they do the surveillance. He said they have a trigger point in their procedures that if they hit 100 psi, they make notifications to what they call their “Surveillance Program Authority,” which is a team made of SRNL folks, and some of the facility people. He said Allen Gunter gets notified as the federal representative on the team, and they decide from that data if there is something they need to do, depending on the history of that can, where it came from, what vintage, and where it was packaged; all those things would have to be evaluated. He stated the most they have seen in any of the measured pressures from any of the 207 they did nondestructive on, or any of the 73, is about 30 psi. He said they’ve had nothing that comes close to where they would start deflecting that lid or get to that point where they need to go take some other action based on what they found for pressure.

CAB member Parson asked what is the maximum time that any of the examined have been stored in containers.

Mr. Bates said they don’t do the Destructive Examination until after five years from the welded date. He said since they have had some of the materials since 2002, they may get some that old, but they may get some that are five years old; however, won’t cut any open that are less than five, unless they have a specific reason to believe there is something they need to go after from an engineering judgment reason.

He said the Destructive Examinations are focused more on corrosion than on pressure or gas composition. He said they haven’t found pressures above 30 psi. He said they have not found anything near a flammability limit in any of the gas samples they have found to date, so what they are really focused on now is corrosion. He said they have seen some corrosion, such as general surface-type corrosion, and some amount of pitting on the inner can, the convenience can, the screw lid, and a little bit of pitting on the inner welded can, but no pitting or corrosion on any of the outer 3013 was found. He said based on what they have seen to date, there is nothing that indicates a problem with the 50-year storage life, but they are continuing the surveillance program and do not plan to stop that.

He continued that in addition to the 3013 surveillance, they also perform surveillance on the 9975 drums. He explained that part of their safety analysis for being able to store these materials in K-Area credits the drum. He said they need to ensure they are maintaining the integrity of those drums and reviewed how the integrity is maintained.

CAB Chair Bridges asked if the size and original design of the 3013 container a good idea or if they should have been larger, or smaller, or changed in some manner. Mr. Bates said it has worked very successfully so far. He said it would be ideal if they could package more of them in a single drum just because it would make storage capacity a lot easier to work with if they could double up and not have so many drums to manage in the storage vaults.

**Recommendation Discussion:**  
**Concern for Receipt and Planning for Disposition of Research Reactor Spent Nuclear Fuel at SRS**

CAB member Hayes said they were sensitive to the fact that there seemed to be a lot of confusion about just which type of spent nuclear fuel the recommendation was referring to. She said, after discussion, they decided to insert “Research Reactor Spent Nuclear Fuel” wherever “Spent Nuclear Fuel” was written. She stated they would be using a new acronym, “RRSNF,” as opposed to the more commonly used SNF. She stated the reason this recommendation focuses on research reactor spent nuclear fuel is because the CAB is tasked with developing recommendations for DOE that would involve programs and activities at SRS. She said SRS does not handle commercial spent nuclear fuel, so the CAB’s focus is on the kind of spent nuclear fuel that SRS handles.

CAB member Jayaraman asked if there is any specific reason the CAB should restrict itself to such reactors.

CAB Chair Bridges said that is a DOE program the President committed the U.S. to do back in the 1950s, that was geared up and happening in the 1960s. He said they were given that program, (the U.S. and SR), and carried it out successfully. He stated that for the most part, spent fuel from a research reactor is highly enriched uranium, which is the stuff one could make a nuclear weapon out of. He said, in this case, they are going away from that, but that material is highly enriched uranium. He said it is very important they get it out of less secure hands. He said once it

is used, they should get it back to a secure location. He continued that after putting it in a secure location, process it and then use the materials again in a constructive manner. He said nuclear power plants don't typically have highly enriched uranium-they have enriched uranium on the order of 5-10 percent U-235 enrichment.

CAB member Hayes added that the CAB has to remain on this specific recommendation, and this specific recommendation focuses on the fact that the committee is concerned that there is no disposition path for those materials out of the SRS. She said it is a rather narrowly focused recommendation as opposed to a general look at spent nuclear fuel (SNF). She then reviewed the recommendation, stating what it asked for.

CAB Chair Bridges asked for a motion to approve the recommendation. The recommendation was brought to a vote. The vote was 18 for the recommendation with no votes against and no abstentions.

**Recommendation Discussion:**  
**Disposition Costs for SRS Research Reactor Spent Nuclear Fuel**

CAB member Hayes stated this recommendation addressed cost issues. She reviewed the recommendation, highlighting discussions from the previous day.

CAB Chair Bridges also reviewed the recommendation and then asked for a motion and a second. A motion and a second were received. The floor was opened for discussion.

CAB member Jayaraman said this recommendation is based on the committee's expertise to view technical options for the disposal for spent nuclear waste, restricting it to the three options. He said he was worried about requesting DOE to investigate the matter and come up with options and with concerned costs of the options. He said his feelings are that the CAB is posing itself as an expert in the disposal of spent fuel waste and is limiting the scope of SRS DOE and its options to consider other technologies or other methods that may be suitable.

CAB Chair Bridges responded to CAB member Jayaraman by stating the CAB is offering up approaches that DOE said they were going to use. He said at one time they said they would do one of these, more recently they said they would do another. He said the recommendation says that if they find a better way, tell the CAB.

CAB member Howard said he didn't think the recommendation was inventing any new activities that can be done with the material.

CAB member Simon called for the question. CAB Chair Bridges called for a vote on the recommendation. The vote was 17 for the recommendation with no votes against and one abstention.

**Recommendation Discussion:**  
**Impact of Blue Ribbon Commission (BRC) Recommendations on SRS Programs**

CAB member Hayes stated that the third, and last, recommendation involves the Blue Ribbon Commission (BRC) recommendations for SRS programs. She reviewed this recommendation, highlighting any discussion from the previous day.

CAB Chair Bridges requested a motion and second. The motion and second were received. He then asked if there was discussion. CAB Chair Bridges called for a vote on the recommendation. The vote was 18 for the recommendation with no votes against and one abstention.

**PUBLIC COMMENTS**

There were no public comments

**~Meeting Adjourned**