

**Meeting Minutes
January 23, 2012
The Westin, in Hilton Head, SC
SRS Citizens Advisory Board – Combined Committees Meeting**

Monday, Jan. 23, Attendance:

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

Agency Liaisons/Regulators
 Shelly Wilson, SCDHEC
 Kim Newell, SCDHEC
 Heather Cathcart, SCDHEC
 Van Keisler, SCDHEC
 Rob Pope, EPA
 Kyle Bryant, EPA
 Diedre Lloyd, EPA

DOE
 Zack Smith, DOE-SR
 Doug Hintze, DOE-SR
 Patrick McGuire, DOE-SR
 Rich Olsen, DOE-SR
 Maxcine Maxted, DOE-SR
 Wade Whitaker, DOE-SR
 Karen Guevara, DOE-SR
 Terry Spears, DOE-SR
 Gerri Flemming, DOE-SR

Contractors
 David Eyler, SRNS
 Dave Olson, SRR
 Nancye Bethurem, SRR
 Ginger Dickert, SRR
 Kim Hauer, SRR
 Kristin Major, TechLaw
 Tiajuana Cochnauer, USFS-SR
 Erica Williams, V3
 James Tanner, V3
 Ashley Whitaker, V3

Stakeholders
 Tom Clements, Alliance for
 Nuclear Accountability (ANA)
 David Rice
 Manuel Bettencourt
 Steve Parson
 George Kliminski
 Dee Kliminski
 James Hoerner
 Joyce Hoerner

Erica Williams, Facilitator, welcomed everyone to the meeting, reminded attendees to sign-in and to speak into the microphone when making comments. She reviewed the day’s agenda and welcomed the CAB Chair Donald N. Bridges to speak.

CAB Chair Bridges welcomed everyone to the meeting, and said Manuel Bettencourt, former CAB Chair was in attendance. CAB Chair Bridges asked for all CAB members to review the dose charts provided to them, and then opened the meeting.

Facilities Disposition & Site Remediation (FD&SR) Committee Overview-Marolyn Parson, Chair

CAB member Parson listed the members of the FD&SR Committee and overviewed the committee’s focus. She announced the last FD&SR Committee meeting, which took place on Dec. 6; she stated who attended the meeting. She reviewed what presentations were given at the Dec. 6 meeting, and thanked those who presented to the FD&SR Committee in 2011, including Brian Hennessey, DOE-SR. She reviewed the statuses of FD&SR Recommendations, stating there is one open recommendation, Recommendation 279; she went over the DOE Response. She stated there was one FD&SR “pending” recommendation, #283; she said the committee was waiting for the DOE Response to Recommendation 283. She then reviewed the FD&SR 2011 Work Plan topics, commenting that all topics were covered, and stated the next FD&SR Committee meeting would take place on Feb. 14, 2012.

CAB member Parson stated there were two topics to be opened for discussion during that day's meeting, including a possible name change for the FD&SR Committee to "Technology & Environmental Stewardship," and a CAB Position Statement on SRS Cleanup. She said during the discussion on the Position Statement, the public attendees could make comments.

She began by opening discussion on the possible committee name change, first referring to the definition of Environmental Stewardship. She continued by stating that when she thinks of Environmental Stewardship, she thinks it conjures up (to the general public) the idea that those who list this as a mission will, through their actions, limit their impact on the environment. She said they may use conservation as a means to do that-she listed organizations that do so. She said the definition of Environmental Stewardship she read earlier is a little confusing and doesn't necessarily fit the mission, but when one looks at the activities being performed at SRS, Environmental Stewardship has some meaning. She said she wanted to put this information into the context of changing the committee name to "Technology & Environmental Stewardship." She referred to a past presentation given by Doug Hintze, DOE-SR, which spurred the idea of changing the FD&SR Committee name to something else. She said there are 12 SRS Strategic Initiatives, published in 2011, and three of these were put into the "Technology and Environmental Stewardship" area; she outlined these three initiatives.

CAB member Parson asked Mr. Hintze, DOE-SR, if they were to change the name of the committee, how would the current issues be incorporated on the CAB's Work Plan. Mr. Hintze said the CAB will decide what the names of its committees are. He stated there is no push or requirement to make any changes to committee names. He said he would be giving a presentation later that day on the Work Plan topics for 2012, which he said would go over the different areas. He said whichever topics each committee addresses is up to the CAB. He said the topics FD&SR are already addressing could be kept within the committee or transferred to another CAB committee. He said the work being put into Facility Disposition would be decreasing over the years at SRS, and that was the driver for suggesting name changes. CAB member Parson opened up the committee name change to the Board for comments.

CAB member K. Jayaraman said of the four committees, the one committee that has a name that is very specific to its activities is FD&SR; he said the other committees have more general names. He said, in his opinion, environmental stewardship does not fit in. He said the point to remember is that all the information brought forth on environmental cleanup has been brought forth through environmental stewardship. He said he found it very difficult to address all the issues underneath such a general name and to assign it to one committee. He said to name a committee after "environmental stewardship" to a committee is not meaningful.

CAB member Denise Long said when she sees the definition of what the CAB is working with, with environmental management and site remediation, she can see the two issues as being lumped together, and thus, does not see a need for a name-change. She said she thinks the CAB is having a problem with incorporating the fact that the CAB wants the new technologies covered so to be able to address them properly. She said she doesn't think any of the current committees address the new technologies. She said she isn't sure if the name-change is necessary; she suggested assigning the topic of new technologies and new missions to one of the committees.

CAB member Ed Burke said he is not sure if the name-change is what should be addressed, but the charter of the FD&SR committee. CAB member Jerry Wadley agreed with CAB member Burke, and said each point of interest has been outlined in the Standard Operating Procedures; he outlined new mission topics the Strategic & Legacy Management (S&LM) Committee picked up. He said he does not believe that the name of committees is critical, but the topics or areas of interest outlined for the committees to discuss are important.

Tom Clements, Alliance for Nuclear Accountability, said what CAB member Burke raised about the committee charter may be something to think about. He continued by providing an example of the small modular reactor program, which is a Nuclear Energy (NE) program. He said he understands that the CAB is an Environmental Management (EM) Board and it may go beyond its charter if the CAB looks at issues that are not only EM, but also NE or other programs. He said the CAB should look at its charter and where the items on the Strategic Plan will fall. He said he doesn't think certain topics will even get to the CAB unless the Board wants to push its work scope.

CAB member Parson said she suggests the Board leave the FD&SR Committee name as it is for now, adding that once the Work Plan is in place for 2012 and the CAB looks at it and decides there is a better name to communicate

the major focus of the committee, the Board could consider a name change if necessary. CAB Chair Bridges said that was a wise course of action.

CAB member Parson then opened up discussion on a proposed CAB Position Statement, “Citizens Advisory Board View of SRS Cleanup.” She described the process of approving a CAB Position Statement; she said anyone can put forth a Position Statement, which will then be vetted through the Executive Committee, and sent through an issues-based committee. She explained each Position Statement would be discussed and voted on at a Full Board meeting, and would only be passed if there was a majority in favor of it.

CAB Chair Bridges explained why he thought Position Statements are a good idea, stating the Board has had the experience where members of the CAB, particularly CAB officers, are asked about where they stand on EM and Site issues. He said if the Board was to follow the current Operating Procedures as they were written, the only way a Board member could express his or her view would be to have the Full CAB discuss it and offer a time allotted to provide public input. He said there are times, however, when a CAB member is talking to his or her neighbor, or the media, and they’re asked about their view on a topic, he thinks it is a good idea to have a focus on what the CAB’s view is relative to some topics. He then brought up the topic of SRS Cleanup. He said CAB Recommendations don’t always cover the general topic, but specifics that are relevant to that place in time. He said Position Statements will indicate that is where the CAB stands, as a unified body, on a particular topic. He said when people ask CAB members their opinions on certain topics the CAB members can point them in the direction of the CAB’s Position Statements.

CAB member Parson said the Position Statement up for discussion is on the Board’s view of cleanup at SRS; she said CAB Chair Bridges vetted the Position Statement through the Executive Committee and they provided feedback. She continued that the FD&SR Committee was asked to take a look at it, and the committee did so at its Dec. 6 meeting. She said the members were in favor of such a statement, and they edited it to make it more understandable. She turned the discussion over to CAB member Tom Barnes, who read the Position Statement to the Board. She said they would vote on the Position Statement the next day.

Mr. Doug Hintze, DOE-SR, commented on the first three bullets of the Position Statement, first pointing out some wording he found confusing. He also said DOE is in the process of completing a lifecycle baseline for the entire EM Program, which goes into the 2030s; he said this baseline makes certain assumptions on things such as risks and funding. He said, tallying from its inception in 1997, total costs for the EM Program will be around \$45 to \$60 billion. The CAB said it could cost “\$70 to \$80 billion” to complete cleanup at SRS (in the Position Statement), and Mr. Hintze said that is a little high. CAB Chair Bridges asked about the reason for the EM Program starting in 1997. He said the Site didn’t produce anything past 1991, so that is six years that are unaccounted for. Mr. Hintze said there is a lot of history to it in the mid-90s. He said the EM baseline report was put together in the mid-90s for what the entire EM Program would cost and how long it would take for the entire complex. He said SRS was a defense program site and not an EM site until the mid-90s. He said there was a transition period from the Cold War and the EM Program was not established until the late-90s. CAB Chair Bridges said he tends to find that DOE estimates tend to be smaller than the actual cost; he suggested looking at projects such as MOX, looking at the actual cost versus the DOE estimate. He recommended changing the wording in the Position Statement to “on the order of \$60 billion). CAB member Parson said the reason why the FD&SR Committee deferred to the DOE on the topic was because CAB member Harold Simon asked at a committee meeting if DOE could confirm if the numbers were accurate and if there was a reference that could be cited so anyone reading it could see where the CAB got the information from; she asked Mr. Hintze if there was a reference they could cite. Mr. Hintze said he was citing the Integrated Lifecycle Baseline; he said that shows all of the integrated projects and programs, and it will change if assumptions are changed.

CAB member Judy Greene-McLeod commented that it may be more accurate to reword a portion of the Position Statement that reads, “seems to be carried out....,” to something more substantive. She said the “seems” is weak. She suggested new wording that stated, “...is progressing in accordance to regulatory standards....”

Mr. Manuel Bettencourt, public, commented that the CAB should decide if the Position Statements would be updated annually, and suggested the CAB use actual dates from the Strategic Plan to write the Position Statements so it is less general. CAB member Parson said the guidance for the Position Statements mandates that the statement be updated and reviewed annually, and must be voted on by the Full Board each time it is approved.

CAB member Jayaraman said before the CAB goes into the details of the Position Statement, he wanted to know what the Position Statement is all about. He spoke about the CAB, saying its scope of work is clearly defined. He said Position Statements normally describes goals and arguable viewpoints that may be there. He said the CAB has a Work Plan and should be working from the Work Plan. He said there is no such thing as a “special position” for the CAB to take on SRS Cleanup. He said priorities change regularly due to a number of things. He said the CAB has been assigned a specific task by DOE, and Position Statements are not included in that. He went over the guidance provided for the Position Statements, stating he didn’t understand why the CAB is approving Position Statements.

Mr. Manuel Bettencourt, public, said one of the purposes of Robert’s Rules of Order is that the minority voice is heard. He asked if the Position Statement is passed, will the CAB attach a minority statement to it; he recommended the CAB do so.

CAB member Barnes reviewed the rest of the Position Statement. CAB member Kathe Golden commented that she thought the CAB should change the wording, “...processing in the foreseeable future...,” to something else. She said the word “processing” is the biggest issue.

Mr. Pat McGuire, DOE-SR, suggested some wording changes under the “Priorities for Cleanup” section. He suggested the CAB break the bullet point, “Receipt and disposition of spent nuclear fuel: Spent Fuel Program” into two different items. He said the CAB wants a priority on receipt and disposition, but those may be different. He also said the CAB should show balance, and the way the Position Statement read, it could be interpreted that the CAB wants no funding or progress on other projects such as soil or groundwater cleanup, or transuranic (TRU) waste. He said DOE has commitments with the state, and regulators, and will continue progress on the lower priorities. He suggested adding a statement such as “balanced funding or progress.” He said he thinks the Position Statements could provide a benefit.

CAB member Stan Howard said since the CAB plans to review this statement each year, the CAB should include the time and expense it will take. He said each year the CAB could update with the expense and year. He suggested changing “DOE must keep the public informed,” to “DOE should keep the public informed.”

Waste Management (WM) Committee Overview-Ed Burke, co-Chair

CAB member Burke listed the members of the WM committee, and encouraged everyone to sign up for the WM Committee in 2012. He said the CAB had one proposed recommendation to discuss, entitled “Need to Continue Ongoing Progress for Closure of Tanks 18 & 19.” He briefly read through the recommendation, and said South Carolina Department of Health and Environmental Control (SCDHEC) solicited the CAB for comments on the tank closures, and the CAB provided comments. CAB member Burke outlined what the CAB recommends concerning the closure progress of tanks 18 and 19. He said the CAB wants to move forward with both of the tanks, as quickly as safety standards permit, keep the public informed, and review the progress in the future to make sure the tanks are closed in an expedient time frame. He asked if there were any comments on the recommendation. CAB member Greene-McLeod said it is a good recommendation, and said she would give CAB member Burke editorial changes later. She offered a few suggestions that she said would simplify the recommendation.

As an edit to the recommendation, Mr. Hintze, DOE-SR, said there are 51 tanks instead of 52.

CAB member Burke spoke about the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 2001-1, stating that 11 years ago there was a severe concern from the DNFSB about a lack of space in the tanks and other issues. He said the Board came back in November or December, and recognized that enough volume had been freed up and the tank cleanup was progressing in a way that allowed the recommendation to be closed. CAB member Burke said he wanted to give “kudos” to the Site for this accomplishment.

Administrative Committee Overview-Kathe Golden, Chair

CAB member Golden stated on Feb. 3 there would be a CAB Work Plan meeting for all of the Committee Chairs. She said the first committee meeting of 2012 would be on Feb. 7, and would be with the Strategic & Legacy

Management Committee. She said the November 2012 Full Board meeting had to be rescheduled to October 29-30, due to conflicts; she said the schedule for the 2012 Full Board meetings was available. She stated the CAB has an easier website address, which is cab.srs.gov. She said the CAB also has a Facebook page, and she welcomed everyone to “friend” the CAB. She said for the first time, the Administrative Committee would have a Work Plan; she listed the members of the Administrative Committee. She spoke about the CAB Committee online meetings, stating it is difficult to watch online meetings on a Mac computer. She suggested that Mac users download Firefox because it makes viewing DOE websites easier. She said the election for committee chairs will take place after lunch on Tuesday’s meeting.

Nuclear Materials (NM) Committee Overview-Rose Hayes, co-Chair

CAB member Hayes was absent from Monday’s meeting, so CAB Chair Bridges gave the NM Committee overview in her stead.

CAB Chair Bridges reviewed the NM Committee’s scope of work, and listed the committee members. He said there were two recommendations that Rose may close the next day-263 and 266; he briefly reviewed these recommendations. He explained that 263 is a joint recommendation with the WM Committee. He said there are three NM Recommendations that DOE provided a response to-these include 280, 281, and 282. He said these recommendations will be changed from “pending” to “open.”

He continued by stating the CAB has been involved in plutonium (Pu) disposition activities in excess of 10 years. He said there is a supplemental Environmental Impact Statement (EIS) hearing as it relates to Pu disposition on Feb. 3 in New Mexico. He said it is Rose’s view that the CAB may want to provide input into that hearing. He said when the Mixed Oxide Fuel Fabrication Facility goes into production, it will use Pu. He said there is a facility that prepares Pu to go from the pit to the Mixed Oxide Fuel Fabrication Facility. He said the hearing relates to locating a processing facility to deal with that from three possible locations, including the H-Canyon, HB-Line, or K-Area. He read over a statement CAB member Hayes put together for CAB approval concerning the Surplus Plutonium EIS. He asked if there were any comments. CAB member Burke asked if it changed the amount of waste that will be left at the Site that currently does not have a long-term disposition path. CAB Chair Bridges said he didn’t think so.

Mr. Tom Clements, Alliance for Nuclear Accountability (ANA), commented that the EIS process is often used for political reasons and to make statements. He said the CAB Surplus Plutonium EIS statement had a tone that was more like a political statement, but it could easily be adjusted to be more pertinent to the process at hand by adding something in it about analyzing H-Canyon and HB-Line from a perspective of criticality, exposure, or waste streams. He said they could frame it as a comment on the EIS technical aspects and not just an affirmative statement.

CAB member John Snedeker commented that one development that has been publicized recently is the emphasis on building Small Modular Reactors. He spoke about press releases from businesses that have been published on the topic as of late, and stated the week prior DOE was drafting a funding opportunity announcement, or opportunity to get participation in public and private financing, for the development of licensing of small modular reactors. He said these press releases, and input he read from former CAB member Art Domby, should be brought to the CAB’s attention. He said the CAB should put more emphasis on new technologies being developed at SRS. He said the discussion the CAB had earlier in the day over the renaming of the FD&SR Committee was a step in the right direction. CAB Chair Bridges said he felt this would be a topic that could more effectively be addressed in the CAB’s proposed Position Statement on New Missions, which would be discussed later that day. He said using H-Canyon or the HB-Line as the processing facility would have help with bringing long-range technologies to the Site.

Mr. Hintze, DOE-SR, commented that one of the things the CAB has to keep in mind is how the statement relates to the EM mission. He said some of items being discussed are NNSA missions, not EM missions. He said when they talk about these topics, they need to relate it back to the EM mission. He said just because it is a good mission for the Site does not mean it is an EM mission, and may be out of the CAB’s scope. CAB Chair Bridges contended that the statement “may be on the edge but is still appropriate.”

Mr. McGuire, DOE-SR, said what CAB Chair Bridges said about the waste is generally correct, and the details of that would be covered in the Supplemental EIS. He said they would not expect to receive any of the pit plutonium that would not be “MOXable.” He said the primary mission would be, from a DOE complex-wide initiative, to use

the assets at SRS to support DOE initiatives. He added that Mr. Hintze was correct, and that is must support in the EM Mission in some fashion.

CAB member Greene-McLeod said it seems like this would fit into the Enterprise SRS mission; she asked if Enterprise SRS was separate from EM. Mr. Hintze said Enterprise SRS is the entire Savannah River Site, so it encompasses more than just EM Missions. He said there are portions of Enterprise SRS that are not necessarily under the purview of the CAB.

CAB member Parson asked CAB Chair Bridges if the material that ends up being processed through the MOX facility currently has any place to go. She asked if it's wise to bring the facility to SRS before DOE has figured out what to do with this material. CAB Chair Bridges said from what he understands, DOE fully intends to and will develop customers for the material, but at the moment there is no commitment. He said, however, that he does not believe it will be an issue. CAB member Burke said he understands from past CAB meetings that the customer of "last resort" would be the Tennessee Valley Authority (TVA). CAB chair Bridges said TVA seems to be one of the most likely customers.

CAB Chair Bridges said he will add a statement or two that includes EM wording and will try to incorporate Tom Clements' comment.

Mr. McGuire said as commercial reactors develop their refueling programs, they need to know years in advance when fuel can be delivered when they schedule their outages so they can replace the fuel. He said this can be scheduled up to 10 years in advance because they need a guarantee that fuel will be delivered by a certain date because they have hundreds of millions of dollars riding on those outages. He said at this point MOX is still under construction, so for them to enter into a contract with TVA or another utility is unlikely. He said they have full confidence that the MOX facility will eventually be used with a commercial reactor.

CAB member Jayaraman said the CAB must define its scope and the area it is supposed to be working in, which he understands to be within the EM Mission. He went over topics in the Strategic Plan. He said the mission of SRS is not the mission of the CAB. He said the CAB should not put its hands on all the things coming up because all of these things are important, but they are not all in the CAB's frame of work. He said the CAB must be cautious in what it is dealing with because the Board has a civic assignment to work within the EM Mission.

CAB Chair Bridges said he would take the input and edit the Statement, and bring it forth for CAB vote the next day.

Strategic & Legacy Management (S&LM) Overview-Jerry Wadley, Chair

CAB member Wadley listed the Vice Chair, and members, of the S&LM Committee, and said the committee was pretty full. He said the committee recently closed two recommendations, including 260 and 272. He briefly reviewed the last S&LM Committee meeting, and said Keith Lawrence would be presenting the next day. He talked about the development and deployment of Small Modular Reactors, stating he would like to see these in the S&LM Work Plan.

PRESENTATION: FY 2012 Budget Update-Mr. Doug Hintze, DOE-SR

Mr. Hintze said since the last time the CAB met, DOE now has an appropriation for 2012. He referred to a graphical slide, highlighting the different Site Programs. The graphical slide was over the Environmental Management Budget at SRS for FY2012; this graph showed the FY2012 President's Budget Request (PBR) and FY2012 Appropriations for the EM Budget, Environmental Cleanup, SRS EM Programs Budget Authority, as well as the total SRS EM Budget Authority. He listed the EM programs, including SR Site Risk Management, Nuclear Materials, Used Nuclear Fuel, Solid Waste, Soil & Water Remediation, Radioactive Liquid Waste Tank Waste, and the Salt Waste Processing Facility. He said overall, the Site is in "good shape" to complete its scope of work. He said in a few weeks, the PBR for FY13 would be released.

CAB Chair Bridges asked what the expenditure was in FY2011. Mr. Hintze said it is a hard question, but every year there is a carry-over of funds; the number was \$350m.

CAB member Wadley said the year before the CAB put in a recommendation to fully fund H-Canyon and HB-Line. He asked if that would be reflected in the President’s Budget in February. Mr. McGuire, DOE-SR, said DOE did get that recommendation and it has been forwarded to DOE HQ. He said they are required by law to continue to maintain H-Canyon’s high state of readiness, to have a core group of workers, to exercise the equipment and have proficiency runs. He stated they will be fully capable of processing Used Fuel, to run through cycles, and recover uranium. He said if the decision is not to actually run the Used Fuel through the facility they will be ready, able and staffed to run. He added that the rate in which they do that will depend on the actual appropriations they get in FY13. He said they are doing other missions in H-Canyon and HB-Line, and have teamed up with NNSA; he briefly reviewed these missions. CAB member Wadley said he thinks the intent of the CAB was for it to be funded at the level it was funded in 2010. Mr. McGuire said they are doing a lot of good, meaningful work. CAB Chair Bridges said someone had mentioned that they were seriously considering processing some spent fuel but not as much as the CAB would like to see; he asked if any of that was on the table for definite processing. Mr. McGuire said it is not definite, but they are still evaluating options.

Mr. Tom Clements, ANA, asked if money would be moved into the PBS 100 Community & Regulatory Support area, and how much will the CAB be impacted if there is still only \$10 million available. Mr. Hintze said the number that is needed is around \$17 or \$18 million. He said PBS 20, Safeguards & Security, has \$130 million, but only needs about \$122 million. He said they are looking at moving approximately \$8 million from Safeguards & Security to Community & Regulatory Support. He said until they move the money that cannot spend more than \$10 million, and that is why they are moving quickly to get the money reprogrammed. He said if the money was not moved, they would have to seize many things in the Community & Regulatory Support within a few months.

Please see below for the graph Mr. Hintze discussed.

**Environmental Management Budget
Savannah River Site**

EM BUDGET (\$M)	FY 2012 PBR	FY 2012 Appropriations
SR Site Risk Management		343
PBS 11C Nuclear Materials	235	
PBS 12 Used Nuclear Fuel	40	
PBS 13 Solid Waste	30	
PBS 30 Soil & Water Remediation	38	
PBS 14C Radioactive Liquid Tank Waste	678	638
PBS 14C Salt Waste Processing Facility	203	203
Environmental Cleanup	1,224	1,184
PBS 100 Community & Regulatory Support	10	10
PBS 20 Safeguards & Security	130	130
SRS EM Programs Budget Authority	1,364	1,324
Federal Program Direction	52	46
Total SRS EM Budget Authority	1,416	1,370
<i>ARRA Appropriation (2009-2012) \$ 1,615M</i>		

FY12 Environmental Management Budget at Savannah River Site

CAB member Wadley then began his review of a second proposed CAB Position Statement, “Citizens Advisory Board’s View on New Missions at SRS.” He read the first three statements from the statement, stating they were “pretty straightforward.”

Mr. Hintze, DOE-SR, said the statement, “the CAB supports the continued construction and operation of the NNSA Tritium Recycle and Mixed Oxide Facilities” is problematic because the CAB is an EM Board, and NNSA is out of

the Board's EM scope of work. He said anything written that supports a NNSA mission is not a CAB mission. He said that all CAB support of future missions must be tied to the EM scope.

CAB Chair Bridges said the CAB is trying to say it knows those existing missions are going to be there, so why doesn't DOE interface or "mesh" with them. CAB member Wadley said the CAB recognizes that its Position Statements are not sanctioned by DOE or EM, but are recognized by DOE as the CAB's right to expression, and under that statement the CAB can say what it wants whether it is under the program or not. Mr. Hintze said that actually that is not true, and the CAB is an EM-sponsored Board, so the positions the CAB are taking are based upon the charter of the Board since it is a CAB decision. He said any decision by the CAB has to fall within the charter of the CAB, which means it has to relate to the EM mission; he referred back to Cate Alexander's, DOE-HQ, talk given to the CAB in September 2011. He said the CAB, as individuals, can take whatever position they want as long as they are not tied to the CAB. He said the reason for Position Statements is to represent the CAB, and when representing the CAB, they are talking from an EM position perspective and in order to do that it must be vetted by the whole CAB at a public forum and must relate to the EM mission. He said he understands they are attempting to come at it from a community perspective, but because the CAB is EM-only, the answer is no, the CAB cannot take the positions outside of the EM program responsibilities. CAB Chair Bridges said he thought they could modify the statement to fit within the EM scope.

CAB member Wadley asked if there were any other statements, beside the third one, that the CAB needed to modify in order to fit the EM scope. CAB Chair Bridges said they will say something to the effect of "all future missions should mesh with the Site." Mr. Hintze said all he would say is as they write any Position Statement, the CAB keeps in mind that it is an EM-sponsored CAB and it has to relate to the EM missions, and any statement the CAB makes has to be tied to the EM missions on the Site. CAB member Wadley asked if the new initiatives are tied to the EM mission. Mr. Hintze said some of the strategic missions in the Enterprise SRS are not in the purview of the EM mission or the CAB because the Plan covers the entire Site. CAB member Wadley asked how does the CAB filter out which is which. Mr. Hintze said all they have to do is ask and they will provide the clarification; he said some are cut and dry, but some may need a little interpretation.

CAB member Clinton Nangle said he noticed when reviewing some of the activities of the other operations across the country, they do get involved in the new missions that create jobs for the community. He said he takes it that these other operations are not tied to EM in the way that the CAB is tied to EM. Mr. Hintze said he cannot comment on other CABs; he said if other CABs that are EM-sponsored are taking positions on non-EM activities, he cannot explain how they have tied that into the EM program.

CAB member Greene-McLeod said this point comes up over and over again and is confusing, so she asks if the Position Statements could have a footnote that says the CAB is an EM Board is limited in what it can speak on, but there are other missions happening on-site. Mr. Hintze said that sounds like a good idea.

CAB member Howard commented that the Site shares the infrastructure and overhead cost with all activities on the Site. He said maybe that could be tied in on how it affects the EM cost or involvement. Mr. Hintze said that is a good point, and explained that EM is the landlord of the Site. He went over the landlord responsibilities. He said they share that cost with site tenants, so if there are more tenants, the cost will be spread out.

CAB member Burke said Mr. Hintze said reducing the carbon footprint was part of the EM mission. He asked if Mr. Hintze was referring to the specific footprint for SRS or the nation's carbon footprint. Mr. Hintze asked Karen Guevara, DOE-SR, to talk about that.

Ms. Karen Guevara, DOE-SR, said it is true that under a new executive order, 13514, and a DOE Order, that DOE does have responsibilities for continuing to reduce the carbon footprint of the geographic site. She said this is part of the EM mission because DOE is the landlord of the site. CAB member Burke asked if it was site-specific. Ms. Guevara stated it is a DOE program, but the site does the site-specific piece of reducing the emissions for SRS. She said the Executive Order is government-wide.

David Rice, public, commented that on the third bullet of the Position Statement being discussed, he thought that "E" meant "Energy," and not "Environmental." He said, with that in mind, if that bullet said something that the CAB opposed, such as constructing a new facility, could be asserted from an environmental perspective. He said he

thinks it is a useful bulletin, stated he may disagree with Mr. Hintze, and said this bullet seems to be coming from a public perspective of concern for the environment.

Mr. Hintze said Mr. Rice's comment is right-on, as in the CAB needs to tie it into the EM work scope. He read the bullet aloud as written and said it did not currently fit into the EM mission. He said the wording that Mr. Rice described would tie the bullet in with the EM mission.

CAB member Burke asked if this Position Statement is ready to be voted on the next day. CAB member Wadley said he believes they should sit down with the DDFO and talk it over before voting on it. He said he would table it for now.

PRESENTATION: Topics for CAB Consideration-Mr. Doug Hintze, DOE-SR

Mr. Hintze said the purpose of his presentation was to present DOE's 2012 plans and activities for the CAB to consider for input in the development of its 2012 Work Plan. He stated the proposed plans include those identified by program managers and those which the CAB has expressed an interest.

He began by listing topics under Facilities Disposition & Site Remediation (FD&SR). The topics listed included C-Area Project Progress, an Annual Integrator Operable Units Program Update, FFA Appendix E Projected Changes, FFA Appendix E Major Proposed Changes, Lower Three Runs Cleanup Approach, Biomass Plants Construction and Operation Update, and a SRS Energy Management Overview. He briefly reviewed these topics.

He then listed topics under Waste Management-Solid Waste. The topics listed included Disposal of SRS Reactor Heat Exchangers, a Legacy Transuranic (TRU) Waste Program Update, and the Waste Isolation Pilot Plant (WIPP) Shipping Status. He briefly reviewed these topics. Mr. Hintze continued by listing topics under Waste Management-Liquid Waste. The topics listed included the Cost Savings Initiative (CSI) process and resultant IPL for FY12, the System Plan Rev. 17, glass waste storage status and storage plan to complete the mission, results of Saltstone sprint runs in fall 2012, the closure progress on Tanks 5, 6, and 16, progress on the Control Room Consolidation effort, ARP/MCU life cycle enhancements and operating performance, readiness for SWPF full integration into the high-level waste (HLW) flow sheet, overall HLW attainment and critical system reliability, Saltstone Disposal Units (SDU) status and project progress, and a Salt Waste Processing Facility (SWPF) project update. He briefly reviewed these topics.

He listed topics under Nuclear Materials, including Plutonium storage, consolidation and disposition updates, UNF storage and disposition updates, H-Canyon missions, and K-Area Complex missions. He reviewed these topics.

Mr. Hintze listed topics for Strategic & Legacy Management (S&LM), including DOE-SR planning, EM Lifecycle Plan, an Enterprise SRS update, the budget request and congressional funding authorization, the Integrated Priority List (IPL) SRS Performance Measures, an US Army Training update, an update on SRS Natural Resources Management, a Savannah River Ecology update, the SRS Environmental Report, and the Reutilization of SRS Assets for Future Missions. He then reviewed all 12 of the SRS Strategic Initiatives. He reviewed all of these topics.

CAB member Burke asked Mr. Hintze to mark the Strategic Initiatives that fall outside of the EM scope. Mr. Hintze said some are obvious, but some are broad; he said he or a subject matter expert could discuss these initiatives with the CAB, depending on the activity.

CAB member Wadley commented that many of the Strategic Initiatives seemed to fall strictly under the National Laboratory (SRNL). He asked if the CAB could interface with the Laboratory under the EM scope. Mr. Hintze said the National Lab is EM's corporate lab; he said the lab gets funding from EM. He said direct dollars to the lab also come from the programs. He said there may be things that the lab are doing for other programs that may not be under the EM purview, but he said the Strategic Plan lists the Lab as being the lead for Enterprise SRS. He said it all goes back to if the programs are EM responsibilities or not; he said many programs within SRNL are in the EM scope.

He stated that DOE-SR expects that the CAB will follow the topics selected for its 2012 Work Plan; however, he acknowledged that topics and issues may arise after the Work Plan has been approved. He detailed the process taken

if the CAB wanted to add topics after the Work Plan has been approved, stating each request would be evaluated and a response given in a timely manner. He stated the CAB is not to engage in activity regarding the requested topics until written approval for the Work Plan has been received from DOE.

He summarized his presentation by stating the SRS CAB is to provide informed and timely recommendations to DOE concerning decisions that affect SRS in areas such as environmental restoration, waste management, and related activities. He said CAB work in 2011 was appreciated, and DOE-SR would like the CAB to use DOE's 2012 plans and activities as input into the development of the 2012 Work Plan.

CAB Chairs Bridges asked about the 235-F building, which he said had "a lot of junk" in it. He asked if the CAB could list that as a topic; Mr. Hintze said that is a good topic.

CAB member Mary Davis asked about the Lower Three Run cleanup approach, stating she heard it was 30 miles long. Mr. Hintze pulled up a map of SRS, stating Lower Three Runs is one of the streams on the Site that through Site activities has contamination in it. He pointed out on the map the area they are going to clean. CAB member Davis asked if there is a report the public can read. Mr. Hintze said they have not done it yet, but this year will be the activities scheduled and the scope of cleanup.

Public Comments

There were no public comments.

~Meeting adjourned

**Meeting Minutes
January 24, 2012
The Westin, in Hilton Head, SC
SRS Citizens Advisory Board – Full Board Meeting**

Tuesday, Jan. 24, Attendance:

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

Agency Liaison/Regulators
 Shelly Wilson, SCDHEC
 Kim Newell, SCDHEC
 Heather Cathcart, SCDHEC
 Van Keisler, SCDHEC
 David Williams, EPA
 Rob Pope, EPA
 Kyle Bryant, EPA
 Diedre Lloyd, EPA
 Gregory Suber, NRC
 Mark Satoruis, NRC

DOE
 Zack Smith, DOE-SR
 Doug Hintze, DOE-SR
 Patrick McGuire, DOE-SR
 Rich Olsen, DOE-SR
 Maxcine Maxted, DOE-SR
 Wade Whitaker, DOE-SR
 Karen Guevara, DOE-SR
 Terry Spears, DOE-SR
 Helen Belencan, DOE-SR
 Brian Hennessy, DOE-SR
 Gerri Flemming, DOE-SR

Contractors
 Dave Olson, SRR
 Doug Bumgardner, SRR
 Karthik Subramanian, SRR
 Nancye Bethurem, SRR
 Ginger Dickert, SRR
 Kim Hauer, SRR
 Jim Kupar, SRNS
 Kristin Major, TechLaw
 Tiajuana Cochnauer, USFS-SR
 Keith Lawrence, USFS-SR
 Dr. Kenneth Sajwan, SSO
 Erica Williams, V3
 James Tanner, V3
 Ashley Whitaker, V3

Stakeholders
 Tom Clements, Alliance for
 Nuclear Accountability (ANA)
 Steve Parson
 Jean Sulc
 Patrick Gurganis
 Laura Walker
 David Millford
 Betty Gold
 Linda Miller

CAB Chair Bridges opened the meeting, and CAB member Alex Williams called CAB member Travis Johnson up to lead in the Pledge of Allegiance.

Facilitator Erica Williams briefly overviewed the day’s agenda, reviewed the public comment process, and turned the meeting over to CAB Chair Bridges.

CAB Chair Bridges opened the floor for comments on the November 2011 Full Board meeting minutes. There were no comments, and so he asked for a motion to approve them. CAB member Williams moved to approve the minutes, and CAB member Denise Long seconded that motion. The minutes were approved.

Chair Update-CAB Chair Donald Bridges

CAB Chair Bridges welcomed members of the public who used to serve on the CAB-Jean Sulc and Manuel Bettencourt.

He briefly went over the CAB membership, stating the new members would start their membership in March 2012. He said the members who requested reappointment to the Board should know their status by mid-February. CAB Chair Bridges asked the CAB to make 2012 its most productive and interesting. He recapped the membership stats, stating how many positions were open and which members were meeting their six-year terms; he thanked everyone for their service. CAB member Golden stated that she had received her reappointment letter in the mail the previous morning.

CAB Chair Bridges stated there were four committee meetings since the last Full Board meeting in November. He reminded everyone that the committees would be meeting on a new schedule in 2012; there will be four meetings per month between Full Boards, and all committees would be meeting solo. He stated there would be no more joint meetings. He briefly reviewed when the committees would meet in February, and the order in which these committees would meet. He said each meeting would last two hours, and would typically deal with two topics, plus committee discussion time. CAB member Harold Simon asked if the two presentations per meeting would be up for committee chair discretion. CAB chair Bridges said it will be up for Chair discretion.

CAB Chair Bridges announced that on Feb. 3, the CAB Chair, Vice Chair, and committee chairs would meet to discuss the 2012 CAB Work Plan. He said interested CAB members would be welcomed to attend, but no members from out of town would be reimbursed for travel.

He stated there was a Site Specific Advisory Board (SSAB) teleconference meeting in December 2011. He said there was nothing of real significance that came out of the meeting, and stated he did not attend the meeting. He then stated he represented the CAB at a Governor's Nuclear Advisory Council (GNAC) meeting in Columbia in December. He said this was the first meeting with former CAB member Karen Patterson as Chair. He briefly reviewed what the GNAC meeting covered, including SRS topics. He spoke about the Barnwell Low Level Waste Disposal Facility, stating it is on the edge of SRS; he referred to a map of SRS. He said the facility is on land that used to belong to the Site. He said it is interesting concerning what materials the facility receives and what cleanup the facility is involved with. He asked CAB member Parson to look into the facility and how it interfaces with the Site.

CAB Chair Bridges said the comprehensive review from the Blue Ribbon Committee would be released on Jan. 29. He said he thought the BRC report would be looking at a deep geologic facility for High Level Waste, as well as temporary storage of Spent Nuclear Fuel (SNF) at SRS, and R&D use at H-Canyon. He added that he thinks the report may also include decisions that impact the SNF from domestic and foreign research reactors at SRS, information on a new agency that performs those actions, as well as revised roles. He said these are just his comments, and others may have different views. He said he thinks it is going to take months to sort out how the report will affect SRS and the general public; he said DOE said it would give the CAB a report when it is practical and feasible.

He then spoke about a potential facility that would deal with the Plutonium that comes out of weapons that would run through the MOX plant; he said there would be a hearing in New Mexico on Feb. 2. He said when CAB member Hayes got this notice she said the CAB may want to provide some comments; he explained why the CAB may want to provide these comments. He said the NM Committee would provide these revised statement later that day.

CAB chair Bridges then reviewed what he referred to as "troubles in Hanford." He read aloud a statement the DFNSB gave to Hanford concerning its safety culture. CAB member Bridges said this statement went out in July, and was in reference to a facility that is the equivalent to the Defense Waste Processing Facility (DWPF) at SRS. He then briefly overviewed an article from USA Today concerning this statement. He said he wanted the CAB to be aware that other areas have difficulties too, but that SRS does not have these same difficulties.

He stated the Savannah River Site Community Reuse Organization (SRSCRO) provided the SRS CAB with a copy of its Annual Report; he reviewed this report briefly, reviewing its initiatives. He said he gave this Annual Report to the S&LM Committee to see if the CAB would like for the SRSCRO to present to the CAB in 2012.

CAB Chair Bridges said he submitted a paper to the 2012 Waste Management Conference. He then stated he wanted the CAB to focus on more input to DOE and more public involvement in 2012. He encouraged the CAB to give DOE “more bang for the buck.”

Agency Updates

Mr. Zack Smith, DOE-SR Deputy Manager, stated Site Manager Dr. Dave C. Moody wanted to be at the meeting, but had to attend an important meeting that day. He welcomed everyone to Hilton Head, and said DOE appreciates the support. He thanked the DDFOs, Mr. Hintze and Mr. McGuire, as well as Ms. Gerri Flemming, the CAB’s Lead Federal Coordinator.

Mr. Smith stated he wanted to recognize and thank the three members who had met their six-year term limit, as well as the three members who resigned for personal reasons. He then presented letters of appreciation to the three retiring members, including Alex Williams, Judy Greene-McLeod, and K. Jayaraman.

Mr. Smith announced that he also had certificates for members who resigned in 2011, including Emile Bernard, Paul Boynton, and Tabitha Barrett.

David Eyler - Savannah River Nuclear Solutions (SRNS)

Mr. Eyler introduced himself to the CAB, stating he is the Deputy Director of the Savannah River National Lab (SRNL). He thanked the CAB members for their service on the Board, saying their input is important. He said SRNS is the Management & Operations (M&O) contractor for SRS, and said it is helping the Site achieve its SRS Enterprise missions, and to move the Site forward. He said he has been at SRNL since November, and had previously worked with Pat McGuire in Nuclear Materials, and was a Chief Engineer before moving to the Lab. He continued that the Lab is tied into almost everything that happens at the Site; he said when the CAB hears about activities at meetings, SRNL is tied into those in many ways. He said SRNL is EM’s National Lab. Mr. Eyler said SRNS and SRNL holds an emphasis on safety. He explained that SRNL has the best safety record of all the national labs. He said the Lab has launched many new initiatives on site in order to keep its great safety record. He stated there are 12 Strategic Initiatives with the Enterprise SRS mission. He stated the Lab has “champions” and “co-champions” with DOE in order to move those Initiatives forward. He commented that SRNL has been nationally recognized for numerous things.

Doug Hintze, DOE-SR: co-Designated Deputy Federal Official (DDFO)

Mr. Hintze, DOE-SR, welcomed everyone to the meeting, and stated SRS is moving on to many activities associated with the Enterprise SRS. He said the number one issue always addressed by the Site is safety. He stated there is a new program onsite that re-emphasizes safety at SRS, and it uses the slogan “Safety Begins With Me.”

He reviewed activities that were occurring at SRS, such as military training and a subsequent Environmental Assessment (EA) associated with that training. He said the EA reported a finding of “No Significant Impacts” in December 2011. He said they will have more exercises onsite.

He continued that the Biomass Cogeneration Plant completed its Readiness Assessment (RA) activities and DOE accepted the plant; he said it is not yet in full operations, but should be soon. He said the plant is part of an Energy Savings Performance Contract and Ameresco is building it with its funds, and DOE will be leasing the plant for the next 20-odd years.

He began summarizing progress within the Liquid Waste Program, stating DWPF continues to operate, and has produced more than 3,300 canisters. He said Salt Stone is currently shut down, and will be shut down into the summer months so to do some outages to perform enhancements. He said the Salt Waste Processing Facility (SWPF) was 55 percent complete, and that the final report just came out with 22 recommendations for SWPF.

Mr. Hintze continued by discussing tank closures, stating they are still performing operations to close Tanks 18 and 19. He said they are also working on many other tanks in accordance with regulatory commitments. He then spoke briefly about the American Recovery and Reinvest Act (ARRA) work, stating there are three different emphasized projects within this work in FY12, including TRU waste, C-Area, and the continued process of plutonium through the HB-Line for disposition at WIPP.

He spoke about the continued preparations for the sodium reactor experimental SNF, commenting that Pat McGuire and Allen Gunter, DOE-SR, have briefed the CAB on it. He said it involves “vulnerable fuel,” and DOE will be in position by the end of the year to start the processing if it is approved. He said there are preps being done for the Non-pit Plutonium, which will go over to MOX, and they expect to start this processing sometime during FY13. He said they continue to receive the domestic and foreign research reactor fuel per the schedule, and will continue with the destructive and nondestructive evaluations.

CAB Chair Bridges asked if DOE has used TRU Pack 3. Mr. Hintze said they have used it, but there was an issue that caused them to not use it as the design did not meet the specifications exactly. He said they had to get a modification so it met the designated standard.

Mr. Terry Spears, DOE-SR, said they have made shipments with the TRU Pack 3, but it has a couple of issues in respect to holding the seal, and they are resolving that. He said they are waiting on six production units that they expect to have in place by June 2012. He stated that TRU Pack 3 is part of future plans, and they have dealt with all of its issues.

CAB member Jayaraman asked who conducted the Environmental Impact Assessment in regards to the Army training. Mr. Hintze said the Environmental Impact Assessment was conducted in anticipation of activities, not after-the-fact. He said it was done by DOE for the Army.

CAB member Hayes asked Mr. Hintze to talk about the receipts from foreign and domestic reactors. Mr. McGuire, DOE-SR, said they still have room to accept foreign and domestic fuel in L-Basin. He referred to a tour the CAB took of L-Basin in 2011. He said they are looking at preparations for some of the sodium reactor experimental fuel, and they will possibly begin moving that out of L-Basin to process, which would free up space. He said they will have to make the decision in the Summer 2012 time frame on whether or not to install racks in L-Basin or to process fuel. He said they have plenty of underwater storage, but limited rack space. CAB member Hayes asked if Mr. McGuire could give the CAB an idea of price per rack. Mr. McGuire said the total cost estimate is probably in the neighborhood of \$30 million total, and would enable them to continue to receive all the fuel it is scheduled to receive through 2019. CAB member Hayes asked if all the receipts coming to SRS are aluminum-based; Mr. McGuire said they are.

CAB member Simon stated that last year the DFNSB had a meeting in Augusta, and H-Canyon and the HB-Line were up for discussion. He said he understood that a SOP would be created for each option, from standby to closure; he asked what the status is of these SOPs. Mr. McGuire stated DOE made two commitments during the public hearing concerning nuclear materials, including an Augmented Surveillance and Maintenance Plan for L-Basin, which is currently under review by DOE, and a Resumption Plan, or SOP, which may or may not be needed. He said they would work with the local Site representatives in order to determine if they need a Resumption Plan.

CAB member Parson said she has been following news articles concerning the Hanford Site, and wondered if there are any parallels to SRS as the HLW is treated and the composition is determined. She asked if the character of SRS’s HLW significantly different than Hanford’s and will SRS, in the future, see the same concerns that are seen at Hanford. Mr. Spears, DOE-SR, said there are many similarities between the HLW at Hanford and SRS. He stated Hydrogen Generation is an issue with any Site that has HLW Tanks and processing facilities. He said this has to be taken into account during the design and operation of the plant in order to maintain safety. He said DWPF has been operating very safely since 1996. He said there are a lot of differences between the technical issues that are being raised in regard to “dark cells,” which is where you put equipment into a cell and seal it up with no future interaction or maintenance. He said this “dark cell” approach is the design mode at the Waste Treatment Plant where many of the issues are being raised. He said they do not use the “dark cell” approach at DWPF, which means they can perform, at the very least, remote maintenance and this works very well. He stated this helps mitigate many of the issues that are being experienced or discussed at Hanford. He commented that he does not believe that there are a lot

of concerns with respect to the technical issues at SRS, but they will continue to watch that closely. He added that another issue that has been raised at Hanford, particularly in regard to the Waste Treatment Plant, is a “safety culture.” He said SRS nurtures and puts a lot of emphasis on its safety culture; safety comes first. He said SRS has regular interfaces with Hanford to share lessons learned; he said both Sites have benefitted from that. CAB member Hayes stated she understands that at Hanford there are 177 tanks that need to be cleaned out, which is considerably higher than what SRS has to deal with. She said when reading the lecture concerning waste tanks, she is surprised that Hanford did not use the same methods as SRS when cleaning out its tanks since SRS had such success doing so. Mr. Spears said he could not speak very authoritatively to that, but said if they could go back they may have made different decisions. He said he cannot go back and say why it was done differently there than it was done at SRS. He said the processing approach benefits from not having a set template since technology does evolve.

CAB member Golden said she received an email concerning some type of substance that was forming in L-Basin. She asked if anyone could update the CAB on that. Mr. McGuire said he didn’t have an update on that. He stated there was a “spider-web-type growth” in L-Basin, and they performed analysis but he didn’t have the results at that time; he said he would provide those results to the CAB when they were made available.

Robert Pope, Environmental Protection Agency (EPA)

Mr. Pope introduced representatives from the EPA, including Deidre Lloyd, Kyle Bryant, and David Williams, as well as Kristin Major, TechLaw. Mr. Pope spoke about Lower Three Runs, stating it is an excellent suggestion for the SRS CAB to receive updates on the subject. He said as the plan proceeds and the work is done, DOE will have to issue a public notice about the actual work as it is required by the Super Fund process.

He said there is a good deal of work proceeding in 2012. He said, luckily, SRS fared better budget-wise than some other DOE facilities, and there is still some ARRA work going on. He said in regards to work in FY12, EPA is fairly pleased with the way things are going and with the work being accomplished. He said FY13 will be a challenging year for soil and groundwater cleanup, as well as for other programs at SRS. He said EPA is keeping an eye out on that and are trying to give input to DOE. He encouraged the CAB to give input on that as well.

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

Ms. Wilson, SCDHEC, thanked the outgoing CAB members for their input over the years, and stated Commissioner Earl Hunter would be retiring in a few days. She said SCDHEC was conducting a search for a replacement, and had narrowed it down to three people, but had not made a choice yet. She said CAB Chair Bridges mentioned Barnwell, SC, earlier during the meeting, and she wanted to inform the CAB that facility is a low-level commercial waste facility that is regulated by SCDHEC. She continued that the waste received at Barnwell is restricted to three states: Connecticut, New Jersey, and South Carolina. She said the groundwater and the surface water are required by DOE to be sampled there four times per year, and these sample results can be found on the SCDHEC’S website; she said she would give the address to anyone who wanted it.

She stated there was a lot of work being done in relation to cleanup and disposition of Legacy Waste oversight at SRS, focusing heavily on the HLW tanks. She said there is a closure module specifically for tanks 18 and 19; she said they requested public comments formally in the fall of 2011 and the public comment period closed on Dec. 15. She said they did receive many public comments and thanked everyone who sent in comments. She said all of the comments were supportive of the plan and the schedule that has been outlined in the module. She said a decision should be made on the closure module soon.

She said SCDHEC is looking at a groundwater monitoring plan for the F-Tank Farm in general, as well as a sampling and analysis project plan and a quality assurance project plan for the F-Tank Farm. She commented that SCDHEC does independent environmental sampling of SRS as a whole. She said this sampling covers an “incredible” range of environmental media including soil, groundwater, air, sediment, vegetation, and more. She said Kim Newell, SCDHEC, and her office has been working on a report to inform of the status of the environmental monitoring; this report will be out in March 2012. Ms. Wilson then asked Van Keisler, SCDHEC, to give a brief update over the soil and groundwater cleanup.

Mr. Keisler introduced Heather Cathcart, SCDHEC, stating she is the Federal Coordinator for the FFA. He said SCDHEC reviewed a total of 11 documents; he briefly reviewed some of these. He said SCDHEC has also reviewed appendices C, D, E, G, H, and K of the FFA. He stated that in addition to those document reviews, SCDHEC has attended five meetings in the past two months, one walk-down, and two Site visits; he thanked DOE for the tour it provided SCDHEC of the L-Basin and the H-Canyon facilities. He said these tours were very helpful. He continued that SCDHEC has continued to have discussions with the Site concerning the F-Tank Farm Groundwater Monitoring Plan, and the D-Area Consolidation Effort. He added that they have also been discussing the Lower Three Runs “tail” removal action.

Ms. Wilson asked if anyone had any questions. CAB member Jayaraman commented, in regard to comments that the CAB has provided comments on tank cleanup, he did not approve of the CAB sending a letter to SCDHEC; he sent the reasons why via email to the WM Committee. He said it was a technical issue that the CAB should not be involved in. CAB member Burke responded, saying the letter the CAB sent to SCDHEC was constructed under a deadline, and South Carolina wanted responses by Dec. 15 concerning the plans to close Tanks 18 and 19. He said one of the things the CAB used to form an opinion on that was the position the GNAC was taking. He said the WM Committee wanted to support that position. He said more than half of the CAB gave positive responses and said the CAB should send the letter. He then stated the WM Committee wrote a formal recommendation concerning the topic, and that recommendation would be voted on by the full Board later that day. He said they did this two-step approach because of timing. CAB member George Snyder said he doesn't see SCDHEC as being another advisory board. He said they are a regulatory agency. He said because of this maybe they should be treated differently. CAB member Jayaraman said he does not believe that a CAB committee chair should be able to send letters to outside bodies. He said this should go through the CAB Chair or the full CAB.

CAB member Parson asked SCEHEC if its reviews resulted in any actions by DOE. Mr. Keisler said all of SCDHEC's reviews result in some type of change, depending on the document and level of the comments being made. CAB member Parson asked for an example of a concern SCDHEC had that resulted in a change made by DOE. Mr. Keisler spoke about the Lower Three Runs Removal Action. He stated there was some additional money left over from ARRA funding to do additional work and DOE decided to address the tail area. He said DOE presented SCDHEC with its plans, and the two agencies had a scoping meeting where they negotiated back and forth. He said this resulted in a change in how the fencing and signage will be in that area.

CAB member Burke asked about environmental monitoring in Georgia, asking if there were plans to extend the monitoring over to Georgia now that a budget is in place. Mr. Hintze said the funding for that is part of the community and regulatory support PBS funding, which is currently under-funded. He said environmental monitoring in Georgia is one of the activities that will have to be prioritized, but DOE will not be able to fund all the activities it has committed to in that PBS. He said they are currently trying to reprogram funds within that PBS, and if they do that, they will prioritize the actions within that funding area.

CAB member Parson asked if the funding within the community and regulatory PBS is not restored, how will it affect the oversight from EPA and SCDHEC. Mr. Hintze said that at first glance there is potential for significant impact.

Mr. Pope, EPA, said that for EPA, SRS is a National Priority Site, so EPA will always have Project Managers assigned to SRS until the cleanup is completed which is still some time away. He said the number of Project Managers EPA can assign to SRS will be impacted by the funding that DOE provides. He said during the ARRA funding, DOE gave more funding so that EPA could assign more project managers that were dedicated to SRS, but now that ARRA funding is coming to a close, EPA has fewer Project Managers working on the Site. He said if they were to completely lose all the funding from DOE, they would have even fewer Project Managers. He said at the moment they have three full-time and one part-time Project Managers working at SRS, and if funding dropped, it would probably be cut down to one full-time and one part-time Project Manager working at SRS. He said this would severely impact EPA's ability to review all the documents, keep up with its work, and to interact with the CAB. He said the first things to go would be EPA's interaction with the CAB, Environmental Justice meetings, and the Super Fund Job Training Initiative. He said they would have to dedicate themselves to the more technical work first, and would only attend CAB meetings when directly requested. He added there was a time in the past where DOE did not provide any support to EPA for Project Manager support and EPA did have issues with not having enough people dedicated to SRS with the level of work SRS was turning out. He said EPA hopes to not return to that situation.

Ms. Wilson, SCDHEC, said that from a state perspective, the amount of money DOE gets and decides to spend is up to DOE management and priorities. He said if SCDHEC received less money or no money, the CAB would see SCDHEC's ability to oversee cleanup grinding to a halt. She said it would "slow or stop."

CAB member Simon said DOE is not providing any environmental monitoring in Georgia, but if they knew if the state of Georgia was providing any monitoring. Helen Belencan, DOE-SR, stated DOE, as part of its regular environmental monitoring program, does considerable sampling and analysis of various soils, air, fish, vegetation, and milk, and incorporates that data into the annual Environmental Monitoring Report. She said this report includes sampling from Georgia, so no one should leave the meeting believing DOE is ignoring the environmental impact in Georgia. She said they do a substantial amount of monitoring in Georgia and South Carolina, on and off-site, and the latest report shows the impact of Savannah River Site operations is small compared to what an acceptable standard is.

Mr. Pope, EPA, said Ms. Belencan is correct and the data that comes out of the Environmental Report is good, but said a direct answer to CAB member Simon's question is that EPD, with the state of Georgia, is not doing any sampling associated with SRS on the Georgia side because they do not have the funding.

Public Comments

Gregory Suber, Nuclear Regulatory Commission (NRC), introduced NRC's new office director, Mark Sartorius. He said Mr. Sartorius joined them in November 2011 and is replacing Charlie Miller.

Nuclear Materials (NM) Committee Overview-Rose Hayes, Chair

CAB member Hayes welcomed everyone to the meeting, and stated what the NM Committee addresses. She reviewed the topics reviewed in the NM 2011 Work Plan, stating the committee has addressed all but two. She introduced the members of the NM Committee, and announced the next NM Committee meeting.

She reviewed opened and closed NM Recommendations, stating 263 was out forward jointly with the Waste Management Committee in 2009; she said they are recommending 263 be closed. She then reviewed Recommendation 266, briefly reviewing it and stating it was opened in 2009; she recommended that one be closed as well. She reviewed Recommendation 276, stating it covers H-Canyon; she recommended 276 remain open. She reviewed Recommendation 280, stating it was created in 2011 and is pending; she said the CAB has a response from DOE, and she wants to leave that recommendation open. She went over Recommendation 281 and stated it is pending; she recommended 281 remain open. She reviewed Recommendation 282, said they have the DOE response, and that they want to keep 282 open.

CAB Chair Bridges asked about Recommendations 270 and 271. He asked Mr. McGuire if he thought these recommendations were "overcome by events", and asked if they should close them. Mr. McGuire said CAB Chair Bridges was correct, and said based on the current DOE decision concerning Yucca Mountain, recommendations 270 and 271 may be moot. He said if DOE re-elects to make a different decision in the future, the CAB could open the recommendations again; he said it is up to the CAB.

CAB member Hayes asked Mr. McGuire if the Plutonium (Pu) max that was established for Yucca Mountain "goes down the tubes" because of the Yucca Mountain decision, are there any other loading standards available that may be recommended in the future. Mr. McGuire stated he was sure there would be some type of acceptance criteria for whatever that federal repository will be in the future, but to speculate what those would be, at this time, is premature. He said, very conservatively, those standards could even be lower than what was in the Yucca Mountain licensing application. CAB member Hayes said the CAB passed a recommendation that asked DOE to increase it considerably. Mr. McGuire said it is his understanding that it was about 897 grams per cubic meter. He said it was so low that there wouldn't even have to be any criticality analyses performed. He said what comes up in the future is anyone's guess. CAB member Burke asked what is the economic impact of reducing the number of glass canisters by 2/3, both in terms of processing and storage. Mr. McGuire said Terry Spears, DOE-SR, could answer that, but he felt the entire conversation was moot because they were no longer discarding Pu to the tank farms, but are repackaging the Pu to ship directly to WIPP in a solid form. He said no longer are they dispositioning Pu to the tank

farms. He said he believes it is generally \$1million per canister. CAB member Hayes asked if any perceived or anticipated reactor receipts, both foreign and/or domestic, “would change that picture.” Mr. McGuire said in regards to the Pu, “generally no.” He continued that in regards to the Liquid Waste System Plan, built into that is the basis that they will continue to receive any High Level Liquid Waste that is generated as a result of processing SNF. He said in the base plan, with regard to foreign and domestic research reactor fuel, it encompasses 300,000 gallons per year of HLW that would be generated in H-Canyon as a result of the processing of SNF; he said they are not doing that right now, but it is built into the base plan. He added that the sooner they can stop sending over HLW, the sooner they can close tanks, which is the goal, and this is why they are currently looking into alternate solutions. CAB Chair Bridges said with that discussion, Recommendation 270 is closed.

CAB member Hayes said the NM Committee was closing Recommendations 263, 266, and 270. She said Recommendations 271, 276, 280, 281, and 282 would stay open. She then briefly reviewed the NM Committee’s 2011 Work Plan, and said the committee hoped to hear a presentation on small modular reactors.

PRESENTATION: Citizens Advisory Board Update on H-Canyon- Allen Gunter, DOE-SR

Mr. Gunter, DOE-SR, gave an update on what’s been going on at H-Canyon and what the plans are. He first gave the current status of the facility, stating they were planning on shutting H-Canyon down initially. He said they completed the flushing of the HB-Line Facility in order to improve the safety posture of the facility. He added that they have completed the dissolution and processing of highly enriched uranium (HEU) materials to meet the current HEU blend down commitments to the Tennessee Valley Authority (TVA). He said they had some additional HEU solutions after completing that above and beyond the contract; he said they have down blended those, and the schedule now is somewhere in the summer time to make the last of three shipments to Irwin, Tenn. He stated they continue to perform operator proficiency runs to ensure the retention of operator qualifications and equipment operability are met. He said within his presentation he would overview Vacuum Salt Distillation R&D in HB-Line, as well as the continued dispositioning of non-MOXable plutonium, the continued remediation of legacy TRU waste in H-Canyon, and the continued receipt of SRNL and F-Area Analytical Lab samples for disposition.

He continued by discussing the disposition of non-MOXable Pu to WIPP, stating they are currently utilizing one of the glovebox lines and ventilation system in HB-Line. He said they are down blending the plutonium oxide with inert material to less than 10 percent plutonium, and package the blended material into Pipe Overpack Containers (POCs). He said they are shipping to E-Area for WIPP certification and loading onto TRUPAC II containers. He stated that in FY11 they prepared 33 POCs and overall made approximately 100 POCs. He said they plan to make a shipment to WIPP in FY12. He stated there are approved Interim Actions that allow the disposition up to 585 kgs of Pu, and the Plutonium Disposition Supplemental Environmental Impact Statement (Pu SEIS) is under development, and is required to support the remainder of the campaign.

Mr. Gunter then reviewed Vacuum Salt Distillation R&D, stating some non-MOXable Pu oxides are contaminated with a variety of chloride and fluoride salts. He said SRS has demonstrated the direct removal of chloride salts in HBL converting non-MOXable Pu to MOXable. He explained that synthetic testing has demonstrated fluoride salts can be removed converting non-MOXable Pu to MOXable Pu. And they’re still working on proving this. He referred to a diagram of Vacuum Salt Distillation.

CAB Chair Bridges asked if fluorides and chlorides are the only contaminants. Mr. Gunter said that they acknowledge that much of their Pu is just “dirty.” He said these is a lot of stuff in there they can’t clean. He said they have a half ton of Pu that the only thing not meeting the MOX specification is the fluoride and chloride content. He said if they can get rid of those two constituents, the material would become MOXable. He said there is more material with fluoride contaminants than chloride. CAB member Hayes asked where the half ton of Pu come from. Mr. Gunter stated it sits in K-Area today, and it came from around the complex.

He provided an overview of the “new mission direction,” stating that on August 26, 2011, SR issued a letter of direction to SRNS; he briefly went over the contents of this letter which included missions such as a potential new National Nuclear Security Administration (NNSA) mission requiring H-Canyon and HB-Line to operate at higher capacity. He continued that on November 10, 2011, SR issued another letter of direction; he briefly went over this letter which included missions such a new assigned mission to H-Canyon and HB-Line, an assumption of up to 3.7 MT of Pu to purify and convert in order to make suitable as feed to MFFF, and a requirement to restart HB-Line

Phase II. He continued with new mission directions, stating SRNS continues to evaluate underwater storage of UNF in L-Basin, and the SRNS initial evaluation has identified the Sodium Reactor Experimental (SRE) UNF as more vulnerable to long-term wet storage. He stated that on November 22, 2011, SR issued a letter of direction to SRNS, stating it should make required preparations to allow the potential disposition of SRE fuel. He said the letter does not authorize the dissolution of the SRE or the high aluminum UNF, only the preparations. CAB Chair Bridges asked what the funding would be if they decided to go forward with these operations. Mr. Gunter stated they have received a letter from the contractor that said to be prepared to spend \$3.8 million. He said they have identified those funds within house, and are preparing a Baseline Change Proposal to go into the system and retrieve those funds. He stated the contractor also identified a need for additional staffing to support processing, and SR is currently working with them to determine how much funding that would take. CAB member Hayes asked about the SRE, inquiring where the name came from. Mr. McGuire said he would send her a video on the history of the SRE.

Mr. Gunter then reviewed the potential missions that are under discussion, stating these include advanced safeguards, the recovery of Am-241, purification and oxidation of Pu-238, advanced fuel cycle R&D, and additional Pu processing for MFFF feed.

He summarized his presentation by stating H-Canyon continues to remain a national asset, they are not shutting down H-Canyon, and they are working with program offices within DOE to identify missions H-Canyon can support. He stated that before proceeding with any reprocessing campaigns, DOE awaits the Blue Ribbon Commission's (BRC) recommendations.

CAB member Golden said Mr. Gunter mentioned that some TRU wastes cannot be shipped to WIPP, such as aerosol cans. She asked what happens to those waste items. Mr. Gunter said pressurized cans are a concern; he said he thinks the process is to puncture the cans to ensure they are not pressurized and then those can be disposed of in the waste system. He said there are some other prohibited items within TRU waste, such as some liquids. He said it is all remediated, but differently.

Discussion over the Plutonium Disposition Supplemental Environmental Impact Statement (Pu SEIS)

CAB Chair Bridges led the CAB discussion over the Pu SEIS, stating this statement began with a proposal from CAB member Hayes, and has been "reworked" since. He read the newest, edited statement and asked if anyone had any comments or suggestions. He asked Mr. Hintze and Mr. McGuire if they saw any inaccuracies that would invalidate the statement.

CAB member Jayaraman asked to add a statement that read something in the terms of, "Environmentally, the CAB will try to minimize any impacts." CAB member Hayes said she would like to add that one of the pushes for the four recommended locations in the statement is that there was discussion over building a new facility that would potentially be located at SRS. She said the decision is now that existing facilities such as H-Canyon should be used because it is more cost-effective. She said her only concern when she read the report is that since most of the facilities they were looking at, including some modifications to MOX itself, are located at SRS. She said it makes more economic sense to locate all of the facilities at SRS so to limit the problems of transportation.

Mr. Hintze said the CAB needs to be careful with its wording of the statement. He said the CAB did a good job with tying it to the EM Program, but the focus should be on the technical evaluation that should be needed. He said the statement currently reads that the CAB has already decided the answer for the SEIS. He said that is not the purpose of the statement.

CAB Chair Bridges responded to Mr. Hintze, stating he reads the statement as explaining where the CAB is coming from in its statement within the first paragraph and then encourages the technical evaluation in the second paragraph. CAB members Burke and Hayes suggested some wording that would address the issue Mr. Hintze brought up.

CAB Chair Bridges said they would work on the statement and would bring it back for a vote at the end of the day.

Facilities Disposition & Site Remediation (FD&SR) Committee Overview-Marolyn Parson, Chair

CAB member Parson began her committee overview by announcing the next FD&SR Committee meeting, and what presentation would be given at that meeting. She thanked her committee members, and said the committee has an open recommendation, 279, and a pending recommendation, 283. She stated that the FD&SR Committee finished 100 percent of its Work Plan in 2011.

PRESENTATION: Annual Integrator Operable Unit (IOU) Program Update- Brian Hennessey, DOE-SR

Mr. Hennessey began his presentation by stating its purpose, and reviewing the IOU Program. He said IOU refers to five major SRS streams and the Savannah River, to which they flow. He said the stream system was not initially in the FFA when it was created in 1993, but was added later; he listed these streams, including Upper Three Runs, Fourmile Branch, Pen Branch, Steel Creek, and Lower Three Runs. He said each IOU includes the surface water, sediment, soil, and biota.

He continued his presentation by stating the IOU purpose, which is to determine and monitor contaminants in SRS streams, assess the health of the stream systems, evaluate human health risk in stream corridors, determine whether early actions are needed, and make final IOU cleanup decisions after operations have ceased and as operable unit cleanup decisions are completed. He referred to a diagram of the IOU Program, as well as a graph that showed IOU-related involvement at SRS between DOE, EPA, NRT, SCDHEC, the CAB, GA DNR, the public, and academia. He then reviewed a chart of the IOU schedule, which listed the five streams, and a chart concerning IOU documents.

Mr. Hennessey reviewed the status of Upper Three Runs, going over the Periodic Report (PR), and stating the PR3 Rev. 0 was submitted August 2010. He said there were no radiological or non-radiological chemicals retained for early action consideration based on the human health or ecological evaluation. He stated there were no early actions identified, and reviewed the ecological data need. He reviewed a photo of Upper Three Runs.

He reviewed the status of Fourmile Branch, going over the PR 4, Rev. 0. He said the most recent PR was submitted in October 2011. He explained no constituents were retained for early action consideration based on human health or ecological evaluation, and no early actions were identified. He then reviewed the ecological data need, and showed a photo of Fourmile Branch.

He reviewed the status of Lower Three Runs, stating SRS initiated an extensive characterization effort during 2009-2011; he listed what this characterization covered. He showed a photo of the "Stream and Floodplain Environment." He then reviewed a graph of the Lower Three Runs IOU Subunits, as well as a graph that showed how it transects along ponds, P and R Canals, and Joyce Branch. He showed a graph of how Lower Three Runs transects along the middle and lower subunits

CAB member Parson asked if there were permanent sampling sites, such as permanent structures in which they could do sampling. Mr. Hennessey answered that it is not permanent and there were no automated sampling devices in place. Mr. Hennessey asked Mr. Jim Kubar, SRNS, if the transects were still marked in the field, and if it was possible to still tell where they are. Mr. Kubar stated they were marked with flagging and that they kept the coordinates for all transects, as well as the reports for the data. CAB member Howard asked if the samplings of the mud or ground were in the streams, or if it was the water in those streams. Mr. Hennessey said they did it all, but didn't take surface water samples of all the transect sites.

CAB member Wadley asked about the distance, top to bottom, of the sampling sites. Mr. Pope, EPA, said it is roughly 15 miles from the bottom of the dam to the Savannah River. CAB member Wadley asked if they have an average distance between the sampling sites. Mr. Kubar said they are 1,000 meters apart, and each of the transects have sampling done 15 meters apart, going from the streambed to the edge of the property. CAB member Wadley asked how long it takes to sample from top to bottom. Mr. Kubar said it takes several months. CAB member Wadley asked how they justified comparing the sampling when taken over several months' time; he said environmental conditions change drastically in the area. Mr. Kubar said most of their concerns were with the soil sediment and the sediment beneath the stream; he said the water quality was good. CAB member Wadley noted that they weren't concerned with comparing the samples from station to station, but with each station's samples over time.

CAB member Greene-McLeod provided a brief background of the stream systems at SRS.

Mr. Pope, EPA, stated there is a fairly old ROD on PAR Pond from the late 90s that says PAR Pond will be maintained at a certain level of water in order to shield the cesium contaminated sediments. He said this was an early decision that was made, but not a final decision. He said keeping the water at a certain level allows the cesium time to decay. He said when the dam had to be repaired, there was a good amount of sampling of the sediment made when the water levels were lower and there are higher levels of cesium in the sediment.

Mr. Hennessey continued by showing a graph of background sampling locations. He went over a chart detailing the 2009-2010 "Expanded Characterization," and then reviewed the human health and ecological screening. He reviewed the IOU Phase II Data Evaluation, stating there were evaluations done on on-site workers, adolescent trespassers, and subsistence fishermen. He said there was a "chronic" ecological evaluation completed, as well as an "acute" evaluation. He then referred to several maps concerning sediment and soil samples for on-site workers, subsistence fishermen, and adolescent trespassers. He also referred to maps titled, "Projections of Cs-137 Activities in Middle and Lower Subunits," "Projections of Cs-137 Activities within the Pre-Cooler Pond and Canal System," and "Location of Ecological Acute Level Exceedances for Sediment/Soil."

He reviewed Biological Data, stating there was no evidence of an impact on fish. He reviewed the method of "Trophic Modeling," and reviewed sampling data for the River Otter and the Belted Kingfisher. He showed a photo of ecological receptors, which included the Belted Kingfisher and a raccoon. He gave a status summary, stating there was a Lower Three Runs PR 4 due in Jan. 2012; he reviewed the human health evaluation and the ecological data needs. He stated no additional early actions were identified.

Mr. Hennessey summarized his presentation by providing the Path Forward. He stated the Lower Three Runs IOU would incorporate Lower Three Runs expanded characterization data into PR 4, which is due in Jan. 2012. He stated Phase III Field starts in March 2013. He added that the Savannah River/Floodplain Swamp IOU would have a PR 3 due in May 2012, and the Steel Creek IOU would have a PR 5 due in August 2013.

CAB member Golden stated Langley Pond was shut down for a period of time due to Mercury. She asked if the Mercury from SRS could have migrated there. Mr. Hennessey said he can't envision that Mercury is from SRS. CAB member Golden said she doesn't think the Mercury there is from SRS, but asked if it was possible for the source that created Mercury at Langley Pond to also have infected the water sources at SRS with Mercury. She asked if it is possible that some of the Mercury found from samples at SRS could have come from an off-site source. Mr. Hennessey said Mercury is a very pervasive contaminant in the surface water in SC. He said there is an advisory on fish in just about every lake, river, and pond in the state of SC. He said he thinks this is from atmospheric deposition.

Ms. Wilson, SCEHEC, commented that historically, because of the industrial period and the advent of human activity, the biggest source of Mercury around the globe is coal combustion and combustion of waste. She said that goes into the air and circles around the globe, and then deposits in places. She said it is a global concern. She said many streams in SC have a fish advisory, but if one looks at the general surface water concentrations in SC, the surface water is safe to drink, but since Mercury in fish can bio-accumulate up to a thousand times higher than the surrounding water, that bio-accumulation causes the fish to be a risk.

FD&SR Committee Discussion

CAB member Parson stated that in regard to a possible name change for the FD&SR Committee, the committee discussed it and decided to not make a name change at this time. She said they would reevaluate that as the 2012 Work Plan is finalized.

She then turned over the discussion to CAB member Barnes, who discussed the proposed CAB Position Statement titled, "Citizens Advisory Board View of SRS Cleanup." CAB member Barnes reviewed the revised statement, and opened the floor for comment.

Mr. Hintze, DOE-SR, suggested a few editorial changes, including the statement “Could last up to 40 years.” CAB member Hayes commented that the CAB has had a good deal of dialogue over future missions at SRS, and has put a lot of stress on the potential for R&D of processing technologies. She said she was not getting the sense that the Position Statement included wording that addresses that. CAB Chair Bridges stated the statement does address “new missions and historic site capabilities.” He said he feels that if the CAB wants to get down to some of the facilities, maybe it could have a Position Statement that deals with a particular area of the site, such as H-Canyon or the L-Reactor Basin. CAB member Hayes said she was just bothered by the absence of certain words, or specific phrases. CAB Chair Bridges said they should address this in the CAB’s other proposed Position Statement on Future Missions.

CAB member Long asked Mr. Hintze if the Position Statement was now within the EM Scope. Mr. Hintze said the statement was now written generically enough so that he could apply it to EM missions. CAB member Jayaraman commented that he did not believe that the CAB should have Position Statements.

CAB Chair Bridges brought the Position Statement up for a vote. It was approved with 15 votes for, 3 votes opposed, and 1 abstention.

The Position Statement was approved on Jan. 24, 2012.

Public Comments

Tom Clements, ANA, commented that he heard that the budget, to be released Feb. 6, had been delayed. He said he had a meeting with the Office of Management and Budget the previous week, and that there didn’t seem to be any surprises beyond the elimination of funding for the Pit Disassembly Facility. He said he knows that Laurence Livermore and the new Pit Plutonium Handling Facility will be an item of interest; he said their funding is in deep trouble. He said the BRC Report is due Jan. 27 or before. He said DOE has continuously said they’re hitching what happens to H-Canyon to the BRC Report. He said there was no mention of H-Canyon in the BRC Draft Report.

He said the Performance Evaluation Reports for the contractors, where they get their incentive fees or bonuses, has been kept confidential when they were not kept confidential before. He said he was denied access from SRS, with the site stating it is business confidential. He encouraged the CAB to urge these Reports to be made public. He said there is a push in Congress to make these reports public, and there is going to be a Freedom of Information fight, and a possible legal fight, to make those public. He said the public should know why Site contractors are being paid sizeable incentive fees.

He said he would express great concern if the CAB passes its statement on the Pu SEIS as it was currently worded. He said if the CAB passes that it is way out in front of the EIS process, and questions of the CAB’s credibility and decision-making process. He said this issue is sure to come up during the New Mexico SEIS hearing on Feb. 2 or 4th if the CAB passes it. He urged great caution in the CAB making statements related to the MOX program and where it is going. He said the MOX program has huge obstacles in front of it. He said they may finish the MOX plant, but there are no reactors, and DOE is now fishing for more utilities to provide reactors to use pressurized water MOX, which will be controversial. He said the TVA Browns Ferry Fukushima designed reactors are going to have to test MOX fuel. He said that testing and evaluation could take 10 years. He said it will be 2028 before any boiling water MOX can be used. He commented that there is also a scheduling issue that has been raised and three of the Browns Ferry Reactors, which are supposed to amount to 50 percent of the MOX program, are scheduled to shut in 2033, 2034, and 2036, which he said means there is no time to use MOX in those reactors. He said there are huge scheduling problems with the MOX program. He warned the CAB to be careful in supporting the MOX program as they could still fail and they would still be left with the Pu.

Strategic & Legacy Management (S&LM) Committee Overview-Jerry Wadley, Chair

CAB member Wadley thanked his committee for its hard work in 2011. He spoke about the committee’s most recent meeting, stating every member was in attendance. He said the S&LM committee closed recommendations 262 and 272; he said no S&LM recommendations were open. He reviewed what the committee was working on, including the proposed Position Statement on Future Missions. He announced the next S&LM Committee meeting.

**PRESENTATION: Natural Resources Management Plan for the Savannah River Site-
Keith Lawrence, USDA Forest Service-SR**

Mr. Lawrence began his presentation by stating its purpose. He explained that the 2005 Natural Resource Management Plan (NRMP) replaced the 1991 NRMP; he said there were some changes. He referred to the Carolina Bays restoration project, which was initiated in 1999 and completed in 2008; he showed a few photos of the project, and stated 20 bays were restored. He defined what a Carolina Bay is, and said they are now shallow depressions that are intermittently wet. He said they are a bit of an anomaly and that there are quite a few of them on the Site.

CAB member Davis asked what was the cost of restoring a bay. Mr. Lawrence stated he didn't have a direct figure, but that it could be fairly simple. He said plugging a ditch takes a few hours with a big piece of equipment, and then they harvesting the timber and sell it. He said restoring a Carolina Bay is not particularly expensive.

He reviewed a graph of Land Uses at SRS, showing areas of industrial, Research Set Asides, and Forest Management. He then showed a map of SRS that focused on the land use distribution. He then focused on SRS Management Areas, referring to a map that showed that listed the following areas: Primary Red-Cockaded Woodpecker (RCW), Supplemental RCW, Other use, Crackerneck, Swamp, and Lower Three Runs Corridor.

He spoke about the management for threatened species, endangered species, and species of concern found at SRS, focusing on the Smooth Coneflower and the Red-Cockaded Woodpecker. He reviewed a graph concerning the maintenance and improved habitat of the RCW to meet recovery population objectives, and showed photos of two other species, the Slash Pine and the Longleaf Pine. He said Longleaf Pine is essentially the replacement for Slash Pine. He said Slash Pine was planted by the Forest Service in its earlier years because it is a tree that easily established, and had good early growth. He said over the years, research done at SRS found a way to plant Longleaf Pines successfully. He said they have an objective, to be accomplished within 2005-2015, to eliminate all the Slash Pines because it is not native to South Carolina. He said they are making good progress on that, but are not quite going to make the objective of eliminating Slash Pine by 2015, primarily because of considerations with managing for the Red-Cockaded Woodpecker. He said they require a certain number of trees within a half-mile radius, and if they removed too many Slash Pines, they would cut into the birds' foraging habitat.

Mr. Lawrence said another objective the Forest Service has to increase the amount of prescribed burning, principally to reduce the risk and hazardous fuels so if there was a wild fire on Site, they would be able to more adequately deal with it. He said that in FY11 they prescribed burned 20,185 acres, and in FY10 they burned 25,583 acres. He said the difference in acres had to do with weather conditions and because their weather helicopter was in repair for much of the year. He said in 2012, they have already burned around 10,000 acres due to favorable conditions, and by using WSI's helicopter.

CAB Chair Bridges asked what time of the year was best for prescribed burns. Mr. Lawrence said part of it depends on the objectives, but January, February, and early March tends to offer the best conditions. He said it is also beneficial to burn during the growing season, but it burns hotter. He said their objective is to have several winter burns, knock the fuel loads down to a certain level, and then as they can, do some burning in June and July. He said the summer burning is the most effective in changing the understory from a rough, woody understory, to a more of a grassy forb [a herbaceous flowering plant that is not a graminoid (grasses, sedges and rushes). The term is used in biology and in vegetation ecology, especially in relation to grasslands^[1] and understory].

Mr. Lawrence showed a picture of the understory before a prescribed fire, and then a photo after a prescribed fire. He spoke about the Enterprise SRS, saying the Forest Service is actively engaged with DOE as the Forest Service looks at ways that its operations can work with future missions at SRS.

CAB member Golden asked if the understory growth is supposed to be part of the fuel for the Biomass Plant. Mr. Lawrence said as part of the Forest Service's regular management, it removes timber through timber sales. He said with the advent of the D-Area boiler, they have been given an opportunity to take advantage of material that would have been considered "waste" before. He said this will give them an opportunity to utilize things that were not utilized before, and for the Forest Service to perform additional tasks in the woods they were not able to do before because it was not cost-effective. He said they will use all the limbs that were left, for example.

CAB member Hayes asked if the Forest Service had any type of plans to allow the public to have exposure to the lands onsite. Mr. Lawrence said that is something DOE would have to work with them on. He said there may be some opportunities, and there are tours going on of SRS. He said it would not be the Forest Service's call.

CAB member Greene-McLeod asked if the Forest service will be fertilizing the soil while harvesting and growing trees. Mr. Lawrence said their goal is to manage in perpetuity. He said much of the site has poor soil from an agricultural standpoint. He said the beauty of Longleaf is that it likes to grow in sandy soils. He said as for maintaining the productivity of the Site, he feels the Forest Service can do that indefinitely. He said they will not degrade the land's capability over time with their present practices.

CAB member Sarah Watson asked if, in managing, there is an opportunity to plant things at SRS. Mr. Lawrence said there is, and the Forest Service plants around 500 acres of Longleaf Pines a year and about 200-300 of Loblolly Pine every year. He said they also have a small program for hardwood-he said they have established some seed production areas for several of the oaks.

CAB member Parson asked about the Forest Service's budget. Mr. Lawrence said the Forest Service generally operates on about \$11 million. He said about half of that is generated through timber sales, so the taxpayer, through DOE, is sharing about \$6 million a year with the Forest Service. He said the Forest Service is generating a dollar for every dollar it receives.

CAB member Wadley asked if Mr. Lawrence was involved in the Strategic Land Use Plan that EM is currently developing. Mr. Lawrence said the Forest Service has had some input and has reviewed it. CAB member Wadley asked Rich Olsen, DOE-SR, how the Strategic Land Use Plan would impact the current use of land if it is implemented. Mr. Olsen, DOE-SR, said the Plan CAB member Wadley is referring to is a plan that DOE is presently developing for the total 310 square miles of the site, which incorporates the new strategic initiatives and the Forest Service. He said it is being pulled together to show an overall picture of what SRS looks like today and where it is going to go. He said he hopes to be able to provide more information on it in the upcoming months.

**PRESENTATION: Environmental Justice Overview-
Kyle Bryant, EPA, & Dr. Sajwan, Savannah State University**

Mr. Bryant, EPA, said he wanted to speak about the Environmental Justice (EJ) Program from the perspective of diversity and inclusion. He stated that oftentimes, there is a misunderstanding of what the EJ Program is all about, and that stems from a lack of clarity. He asked what image comes to mind when one thinks of an EJ community. He said many members of regulatory agencies have expressed that an EJ community seems to be a horde of people who are angry at an agency that is unsure on how to address their concerns. He then asked what image comes to mind when one thinks about environmental regulatory agencies. He said some people envision those agencies as scientists in a lab, speaking technical jargon. He said it is all a matter of perception.

He defined "diversity," stating they wanted to reclaim that word and that it is powerful. He said it can be defined differently depending on who you ask, and that is problematic. He then defined EJ from the EPA's perspective. He reviewed EPA's Region 4 priorities, and then said they wanted to prioritize EJ because it is the morally right thing to do, there is a constitutional right to equal protection under the law, and Clean Air Act, the Clean Water Act, and CERCLA have an inherent inclusion message.

He spoke about the economic implications of EJ, and showed a map of EJ communities. He reviewed the Plan EJ 2014, which he said is a strategy to help EPA integrate EJ into its programs. He said it promotes the development of a common mapping platform, promotes better coordination of grant programs, and emphasizes five cross-agency areas. He then reviewed the cross-agency focus areas.

He reviewed the program's next steps, which included finalizing the regional EJ guidelines, increasing outreach efforts, and enhancing communication and enforcement efforts. He outlined some of the EJ outreach efforts that include SRS, and spoke about recent community EJ meetings. He briefly discussed the Super Fund Job Training Initiative, stating it has been very successful.

Mr. Bryant spoke about CAB collaboration, noting it was important and stating the EPA is always seeking opportunities to collaborate with and support DOE. He spoke about communication, saying it should never be under-valued. He then showed a comic that he said explained a typical EJ project. He said it is important to talk and listen. He then spoke about diversity, and differences, stating difference is “relational.” He said differences between people can cause tension, but that tension between organizations is healthy. He said organizations should ask themselves if they have the “proper container” to handle pressure or tension. He spoke about interactions between distinctly different people, groups, and organizations, and how it can bring about “sweetness,” or consensus.

He spoke about what the CAB could do to support EJ, including continue to provide strong leadership, maintain an Open Door Policy, join the EPA in EJ discussions or sessions, think outside the box, and share examples of EJ successes.

CAB member Snyder asked what were the biggest concerns discussed at EJ meetings. Mr. Bryant stated that people at EJ meetings don’t come out for the ongoing activities at SRS, but rather out of concern for jobs, and emergency preparedness. He said they do have a genuine curiosity in what SRS would do in the event of an emergency, such as a tornado.

CAB Chair Bridges asked where the EPA stands in regard to round three of the Super Fund Training Program Initiative. Mr. Bryant said they are currently in a holding pattern, but have had good discussions with Parsons over positions that may become available. He said they may have to push the timeline back, but Round Three is “looking good.” He said they will likely be able to introduce 10 positions.

CAB member Snyder asked how big the turn-out is for EJ meetings. Mr. Bryant said they have about 90 to 100 people in attendance. He said it is interesting that many people at the EJ meetings don’t know about the CAB, and vice versa. CAB member Long gave her account of an EJ meeting, saying she was impressed with the turn-out and presentations.

CAB member Jayaraman said he thought the EJ Program was by itself a free-standing organization. He asked for clarification on how the EPA is connected to EJ. Mr. Bryant said there is an interagency working group on EJ, which is comprised of all the federal agencies. He said they have standards to go by, but each agency has its own approach, etc. He detailed what EPA does as an agency for EJ that other agencies may not do. He explained that his presentation was from his perspective, as someone who works with the EJ Program and in EJ communities.

Dr. Sajwan’s portion of the presentation was not recorded due to an audio error. You can find the presentation on the CAB’s website at cab.srs.gov

Discussion on Proposed CAB Position Statement on Future Missions at SRS

This discussion was not recorded due to an audio error; however, this proposed Position Statement was not voted on and was tabled for future discussions.

Waste Management (WM) Committee Overview- Ed Burke, Vice Chair

The WM Committee discussion was not recorded due to an audio error; however, the committee’s discussion outline, which was created by the WM Committee Chair, can be found on the CAB’s website at cab.srs.gov

PRESENTATION: Saltstone Enhancements- Karthik Subramanian, SRR

This presentation was not recorded due to an audio error; however, you can find the presentation on the CAB’s website at cab.srs.gov

PRESENTATION: Key Inputs & Assumptions for System Plan. Rev. 17- Doug Bumgardner, SRR

Mr. Bumgardner went over his presentation's agenda, and its purpose, and then referred to a graph of the Liquid Waste System, which provided an overview of the program. He reviewed the System Plan purpose, stating the plan documents the current operating strategy of the SRS Liquid Waste System, including the receipt, storage, treatment and disposal of radioactive waste, the closure of waste tanks and processing facilities, and process simulation performed with modeling software. He said the Liquid Waste System Plan is issued annually with DOE-SR reviews and approval.

He continued his presentation by reviewing the System Plan targeted results, which included process salt waste, reduce lifecycle cost and schedule for sludge processing, close tanks, and support H-Canyon nuclear materials stabilization operations. He then referred to a graph of the System Planning Process. He reviewed a diagram that covered the Key Technical Assumptions, and stated that changes are driven by advances in technology, change in sequencing, acceleration opportunities, cost savings opportunities, and funding adjustments.

He discussed System Plan Rev. 17 inputs and assumptions, reviewing ARP/MCU, Small Column Ion Exchange (SCIX), and the Salt Waste Processing Facility (SWPF). He said SWPF would start-up in Oct. 2014, and the processing rates increased through implementation of next generation solvents. He said SWPF processing supports ARP/MCU operations and is increased with SWPF startup. He said DWPF will implement productivity enhancements during the SWPF tie-in outage, and DWPF melter replacement occurs during the SWPF tie-in outage and then every six years.

CAB Chair Bridges asked if the melter replacement was a "given" during the outage period. Mr. Bumgardner said there is always room for change, but that melter was installed in 2003. He said this was the only melter used so far, and the advantage of putting it in during the outage, even though it may last longer, is so they would not have to do it later.

CAB member Golden asked if the life span of the bubbler is the same as the melter and would it be replaced at the same time. Mr. Bumgardner said the bubblers are part of the melter that is replaceable. He said the bubblers that were installed about a year ago have lasted a bit longer than expected, but they don't have to change the melter to change the bubbler. He said bubblers can be changed more routinely.

Mr. Bumgardner stated the tank farms will support waste receipts from H-Canyon. He then summarized his presentation by stating the System Plan documents the current operating strategy of the SRS Liquid Waste System Plan, inputs and assumptions are based on operating experience and facility design, and change as a result of technology improvements, cost-savings initiatives, and funding constraints. He said the System Plan Rev. 17 assumptions are aligned to meet the Federal Facility Agreements for waste removal and tank closure commitments, and the Site Treatment Plan commitment for completion of waste processing.

CAB Chair Bridges asked if the date of Oct. 2014 is reliable for SWPF. Someone in the audience answered that for the schedule they have right now, the Oct. 2014 date stands. He said the large ASME vessels are the outlier right now, and that continues to be a struggle. He said to keep in the mind that the baseline schedule date has been, since Critical Decision Three, Oct. 2015. Mr. Bumgardner then spoke about sensitivity cases, which looks at things that may change in the plan, and said from a planning point-of-view, they want to know what the early date is.

WM Committee Discussion-Pu SEIS Statement from CAB

CAB member Burke first discussed the Pu SEIS statement discussed earlier in the day, and introduced the newest revisions. CAB Chair Bridges read through it briefly, and said he thinks the newest revisions addresses the earlier concerns that were raised. CAB member Burke asked if anyone had comments.

CAB member Long asked about a comment at the end of the statement that addressed MOX. She asked if it was needed in the statement, or was appropriate. CAB member Burke said he understood her question, but said he thinks the reason for that was to emphasize other points; CAB Chair Bridges said the sentence seemed innocuous to him. CAB member Hayes said the sentence concerning MOX is in the statement because providing feed to MOX is the

endpoint of the EM program discussed within the statement. Mr. Hintze said what CAB member Hayes discussed is not an EM mission, but a NNSA mission. He said the CAB needs to stick to EM Program responsibilities.

CAB Burke said he does not feel that sentence is critical to the statement, and does provide conflict, so he suggested the CAB cut that sentence from the statement and then vote on it.

CAB member Burke called for a vote on the Pu SEIS Statement. It was approved with 16 votes for, one opposed, and no abstentions.

Recommendation Voting-WM Committee

CAB proposed Recommendation, “Need to Continue Ongoing Process for Closure of Tanks 18 and 19” was briefly reviewed by CAB member Burke; he detailed all edits incorporated from the previous day’s meeting.

CAB member Jayaraman commented he is glad the recommendation in discussion was coming out of the CAB. He added that whenever the CAB talks about the delay of things, it needs to understand there is nothing wrong with delays. He gave examples of when a delay is a good thing.

CAB member Burke asked for a motion to close discussion and then called for a vote. The recommendation was approved.

Administrative and Outreach Committee Overview-Kathe Golden, Chair

CAB member Golden announced that the Administrative Committee has a new name: The Administrative and Outreach Committee. She said the CAB Support Team was passing out ballots for Committee Chairs.

She said her committee is trying to form a list of organizations in the area that would like to have a CAB member come and speak to them; she asked the CAB to help in this. She said CAB member Long has been working on the Speakers Bureau presentation and is almost done. She spoke about the CAB membership campaign, stating it had ended. She said the CAB received 23 new applications, and five members applied for reappointment. She said those who applied for reappointment should receive their letters soon.

CAB member Wadley asked if CAB member Golden had a subject list for members going to speak at organizations. CAB member Golden said the subjects include information on the CAB, how it started, where it started, why it started, a brief history, its charter, etc. She said it is only on the CAB, and not Site activities. CAB member Long said one of the things they wanted to do is introduce the community to the CAB itself. She said they could bring along a DOE representative. Mr. Hintze, DOE-SR, said CAB Position Statements could also help with outreach.

CAB member Parson asked for a deadline on sending topics to the Administrative and Outreach Committee. CAB member Golden gave a deadline of March 1 for topics.

CAB member Golden said the Work Plan meeting would be held on Feb. 3, and the Administrative and Outreach Committee would also meet during this time.

The committee chair voting ballots were counted and the committee chairs were announced as:

- Administrative and Outreach Committee-Kathe Golden
- NM Committee-Rose Hayes
- S&LM Committee-Harold Simon
- WM Committee-Ed Burke
- FD&SR Committee-Marolyn Parson

Public Comments

Marolyn Parson, CAB, commented that she is from Bluffton, SC, and at this meeting, 10 people attended from Bluffton. She said she sent out one-page letters to 22 of her friends, inviting them to attend the meeting and a

reception held by her and her husband after the Full Board. She challenged all CAB members to invite as many people as they could. She said with a little effort, the CAB can increase its participation.

She stated that the CAB did really well concerning acronyms for one or two meetings, but has regressed. She said the day before, two of her friends who attended the meeting, said the acronym “EM” kept being brought up. She said it took them a while to figure out what “EM” meant. She said when this type of thing happens the person becomes preoccupied with finding out the meaning of the acronym and quits paying attention to the issues being discussed. She challenged everyone to use less acronyms.

Tom Clements, ANA, said he raised the question of the availability of the Performance Evaluation Reports earlier. He put in a formal question about that. He said he heard some discussion during the meeting over Small Modular Reactors. He spoke about news from the United Kingdom concerning the potential to use the GM Prism Reactor. He said this is the reactor being looked at for SRS. He said they are currently rejecting that reactor.

He said ANA constantly lobbies and educates members of Congress on the cleanup budget. He said it is an agreement between all the public conscious groups that the cleanup program needs the highest level of attention from DOE. He said he has a lot of questions on it and how the money is spent. He said, however, that in general, the budget is supported. He said even though he has some doubts on how things are proceeding and being done, the HLW issue at SRS is of the most importance that it be funded. He said he appreciates the way the NRC is interacting. He said he does have some issues with just closing the tanks and leaving them, but doesn't see a better way forward. He said he and his organization will lobby that this program be funded.

Judy Greene-McLeod, CAB, said this was her last meeting as a CAB member and last opportunity to make comments as the Vice Chair of the CAB. She thanked everyone who was involved with running the meetings, and thanked DOE and the contractors for sharing information with the CAB in a timely manner. She thanked everyone for their kind words.

She said the SRS CAB has been recognized in the DOE complex as a model of thoughtful and effective stakeholder involvement and said she hopes this continues. She stated it will be a challenge as the CAB goes forward due to budget constraints. She said one thing that has bothered her, and the CAB at large, is the loss of its Technical Adviser. She reminded DOE that joining the CAB is overwhelming and said the Technical Adviser is important. She said they are almost like a college professor, and a good one directs the CAB.

She encouraged new members to go to the website and familiarize themselves with the guidelines for SSABs. She said even when Cate Brennan, DOE-HQ, presented she was not aware of information in the bylaws about the CAB providing budget input. She said the CAB should have a say-so in the budget.

She stated a concern over the location of the meetings in Aiken. She said if DOE really wants public involvement, the DOE Meeting Center is too hard to find and uninviting. She said DOE should more widely advertise it to get more public involved, such as a wine and cheese event.

She said being on the CAB has been an enriching experience, and she is thankful for it all.

Alex Williams, CAB, said he is really blessed to be associated with the CAB, and it has enriched his life. He wished the CAB the best as it goes forward.

K. Jayaraman, CAB, said he enjoyed his six years on the CAB. He said the CAB is made up of great people, but he wanted to thank SRS and DOE. He said the SRS CAB prestige has gone up because of them as well. He said they cannot function in isolation. He thanked them all for their interest taken in the CAB and the information provided. He said this makes the CAB successful. He said the SRS community would also appreciate it if the CAB could focus just not on the faults, but on the broad missions, etc. He thanked everyone for the opportunity, and said being on the CAB was a great privilege.

~Meeting adjourned

Attached is:

- CAB Position Statement “Citizens Advisory Board View of SRS Cleanup”
- CAB Proposed Position Statement “Citizens Advisory Board View of Future Missions” –tabled
- CAB Recommendation “Need to Continue Ongoing Progress for Closure of Tanks 18 &19”
- Surplus Plutonium Disposition Supplemental EIS Addition Scoping Meeting, SRS CAB Comment

Position Statement
Citizens Advisory Board View of SRS Cleanup
January 2012

- Overview: The SRS Citizens Advisory Board (CAB) supports DOE's Cleanup Program and acknowledges that the process:
 - Is massive and very complex,
 - Could last up to 40 years, and
 - Could cost on the order of \$50 B to complete¹.

Even in the face of this extensive effort, the cleanup program is progressing in a timely manner to meet regulatory standards.

- Priorities for Cleanup: The CAB supports the following priorities established by DOE:
 - Essential activities to maintain a safe and compliant posture.
 - Stabilization and disposal of radioactive tank waste: Liquid Radioactive Waste Program.
 - Receipt, storage, and disposition of spent nuclear fuel: Spent Fuel Program.
 - Consolidation, stabilization, and disposition of special nuclear material: Plutonium Disposition Program.
 - Transuranic and mixed/low-level waste disposition.
 - Groundwater and soil remediation.
 - Excess facilities deactivation and decommissioning.
- CAB's position on DOE's priorities are as follows:
 - The Radioactive Liquid Waste Program should be given top priority, adequate funding, and management attention.
 - Spent fuel Program should be given a higher priority beyond the FY 12 budget year, which allows for spent fuel receipts at SRS but does not provide a path forward for site removal.
 - The H-Canyon should remain fully operational to support processing and disposition of all spent fuel at SRS.
 - As the only such processing facility in the entire U.S., the H-Canyon should remain fully operational to support all future chemical separations and stabilization of DOE nuclear materials.
 - The Plutonium Disposition Program should also continue major priority and emphasis.
 - The disposition process for this material has gone on far too long (in excess of 10 years) and more decisive and definite measures should be taken.
- The CAB understands that a certain degree of balance will be necessary to carry out all of the programs including programs of lesser priority. For example, some funding of lesser priority programs may be necessary even when higher priority programs are not fully funded.
- DOE should keep the public informed, in a timely manner consistent with commitments to the State of SC, on measures being taken to disposition plutonium, spent nuclear fuel, and the removal of waste canisters from SRS.
- CAB's position on long-range future for SRS.

¹ SRS Integrated Life-Cycle Baseline

- The Site should be postured to receive new missions based on historic Site capabilities.
- DOE should be ever mindful of the unique environmental assets that the site offers, should be especially protective of the opportunities for environmental research, and allow the public to view and enjoy nature in this setting.

Surplus Plutonium Disposition Supplemental EIS Addition Scoping Meeting:
SRS CAB Comment
January 24, 2012

The SRS Citizens Advisory Board (CAB) supports the proposed concept of a facility for the disassembly of pits and conversion of pits and conversion of plutonium metal originating from pits to feed material for the Mixed Oxide Fuel Fabrication Facility (MFFF) and supports the study of EM facilities and capabilities for such a facility. The CAB further strongly supports consideration of such a facility for SRS.

While any SRS location would be acceptable to us we feel the EM facilities-H-Canyon and HB-Line seem to show the most promise with their present status. EM requires SRS to maintain H-Canyon in a high state of readiness (nominally \$150M/year). Use of these facilities for the pit disassembly and conversion could be done in a cost sharing manner such that continued operability of H-Canyon and HB-Line is cost effective for both EM and NNSA programs. In addition, this approach would maintain the H-Canyon/HB-Line facilities in a more capable mode (fully operable vs. "high state of readiness") and perhaps extend the time that certain nuclear materials (yet to be defined) could be processed. Overall, this additional mission should be a positive for the EM program.

The SRS CAB has an intense interest in and support for those facilities. We encourage a technical evaluation for the potential of these facilities. Currently, the SRS CAB has a series of recommendations which deal with enriched uranium disposition, effective utilization of H-Canyon, receipt and planning for disposition of research reactor spent nuclear fuel at SRS, and disposition costs for SRS research reactor spent nuclear fuel. Locating the disassembly and conversion facility at SRS seems the most logical in as much as that program directly or indirectly interfaces with the several other activities involving utilization of the H-Canyon/HB Line.

**Savannah River Site
Citizens Advisory Board**

**Recommendation # 284
Need to Continue Ongoing Progress for Closure of Tanks 18 and 19**

Background

Savannah River Site (SRS) has been involved in an intensive program for the closure of the High Level Waste (HLW) Tanks at the Site beginning in the 1990s. Early on the regulatory criteria for cleaning and closure of the waste tanks were governed internally by the Department of Energy (DOE), and externally by the US Environmental Protection Agency (EPA) and South Carolina Department of Health and Environmental Control (SCDHEC). However, in 2005 the Site was granted legislative authority to close the tanks by the National Defense Authorization Act (specifically Section 3116) provided certain provisions were addressed. These provisions included such requirements as cleaning the tanks to the maximum extent practical and disposition of wastes in accordance with certain performance objectives designed to protect the public and the Site workers. Also included in the legislation was the requirement that DOE consult with the Nuclear Regulatory Commission (NRC) relative to tank closure.

To date, two of the Site's 51 HLW tanks have been closed (Tanks 17 and 20) and several other tanks are in an advanced state of preparation for closure. The next two HLW tanks planned for closure are Tanks 18 and 19. Progress has been slower than the SRS Citizens Advisory Board (CAB) would like. For example, one earlier SRS System Plan (Life Cycle Liquid Waste Disposition System Plan Rev. 14.1 dated October 2007) had closure of Tanks 18 and 19 in FY 2007. The present System Plan Revision 16 shows closure of Tanks 18 and 19 in FY 2012. We have been advised that some of this delay results from the inclusion of additional modeling techniques proposed by the NRC. In November 2011, the CAB was advised that the NRC concurred fully with the closure measures for Tank 19 but still had some questions regarding tank inventory of radioactive materials and modeling for Tank 18. Hence, the NRC has recommended delaying closure for Tank 18.

At any rate, FY 2012 is well advanced (FY 2012 began on October 1, 2011) and DOE and SCDHEC are undergoing an extensive final review, public input, and approval process with the goal of having a decision on the adequacy of closure measures early in calendar year 2012 (January/February timeframe).

Comments

Clearly the CAB is not in a position to make a technical judgment on the adequacy of measures taken to meet the tank closure criteria, but DOE and its Contractor, Savannah River Remediation, make a very convincing case that measures taken to date are adequate and proper. Further, there have been many technical measures taken from FY 2007 to FY 2011 to remove as much of the radioactive waste material from the tanks as practical. In addition, the NRC is not prepared to disagree with actions taken to date with a strong technical basis; rather they are resorting to a "neutral" position pending further studies and analyses.

One of the models the CAB questions is the annual exposure that an individual would receive (less than 10 mrem¹ of annual exposure) 100 meters from the Tank Farm 10,000 years from now.

¹ DOE standard M 435.1-1 is 25 mrem per year.

This seems unreasonably constraining since the average individual exposure in the US is approximately 620 mrem² per year from natural causes and medical procedures. We also note that 10,000 years as a planning basis seems unrealistic.

We also note that cleaning of these tanks has been ongoing for several years and has been scrutinized closely by DOE, the NRC, EPA, SCDHEC, the Defense Nuclear Facilities Safety Board, SC Governor's Nuclear Advisory Council, and the National Academy of Sciences. This level of overview seems to be adequate and acceptable.

In view of likely budget cuts, and the extent of effort to date, it seems prudent to the CAB that the present schedule be maintained for FY 2012. It has long been a concern of the CAB that tank cleaning would always be subject to ever increasing scrutiny which leads to delays.

All parties involved in tank cleanup need to keep in mind that decisions resulting in delays are preventing progress on the large volume of wastes in the remaining 47 tanks. Potential future funding constraints will make these delays more critical.

The SRS CAB Waste Management Committee has sent a letter to SCDHEC stating the committee's support of the below recommendations.

Recommendations:

The Savannah River Site Citizens Advisory Board recommends that DOE:

1. Take extraordinary measures to meet or exceed the schedule for closure of Tanks 18 and 19 consistent with the FY 2012 closure schedule and not delay closure unless significant safety issues are raised.
2. Continue to provide updates, in conjunction with related review organizations, to the public on closure progress for these tanks and all the remaining tanks scheduled for closure.
3. Develop a review of the lessons learned from this closure action and note improvements to accelerate future closures.

² Nuclear Regulatory Commission, 2011

Draft Position Statement
Citizens Advisory Board View on New Missions for SRS
Rev. 2 (1/10/2012)

- Overview: The SRS CAB supports the Site in acquiring new missions for the Site based on SRS historic capabilities and expertise. The CAB feels that this approach should be continued in an aggressive manner seeking opportunities for jobs in the general area while maintaining the basic character and framework of the Site.
- The 2011 Strategic Plan for the Site encompasses this approach in a careful and thoughtful manner and is fully supported by the CAB.
- The CAB supports the continued construction and operation of the NNSA Tritium Recycle and Mixed Oxide Facilities.
- CAB position on Future Missions.

In addition to, and in support of, the initiatives outlined in the 2011 Strategic Plan, the SRS CAB has determined that:

- ❖ the Site should be considered a national resource with continuing missions and that cleanup should be supportive of such future missions.
- ❖ nuclear initiatives consistent with the Site's historic capabilities and expertise are particularly appealing. Suggested areas include:
 - Developing a Research and Test Reactor Facility at which universities and industry could collaborate on research into advanced materials, fuels, and other cutting edge technologies
 - Developing the facilities and advance the expertise to produce medical isotopes in the U.S.
 - Research and Development on nuclear fuel cycle.
 - Developing nuclear security and non-proliferation activities/initiatives.
- ❖ Other Energy Initiatives should include:
 - Energy Park concepts
 - Wind and Solar Energy Research and Development
 - Nuclear Energy R & D including small modular reactors.
- The Site should continue to embrace environmental studies of all types to maintain and expand the in-depth body of ecological knowledge.
- A Strategic Land Use Plan should be developed that considers development/utilization of underutilized areas of the Site for use by local/regional enterprises and/or communities.