

Meeting Minutes  
Savannah River Site Citizens Advisory Board (CAB) – Combined Committees Meeting  
New Ellenton, South Carolina (SC)  
September 21, 2015

Monday, September 21, 2015 Attendance:

<u>CAB</u> Gil Allensworth Tom Barnes Andrew Bush – <i>Absent</i> Louie Chavis Susan Corbett Robert Doerr Murlene Ennis – <i>Absent</i> Dawn Gillas David Hoel Eleanor Hopson Virginia Jones Daniel Kaminski John McMichael - <i>Absent</i> Clint Nangle Larry Powell Bill Rhoten – <i>Absent</i> Earl Sheppard Harold Simon George Snyder Nina Spinelli James Streeter Ed Sturcken Christopher Timmers	<u>DOE/Contractors/Other</u> Terry Spears, DOE-SR Jim Folk, DOE-SR Maxcine Maxted, DOE-SR Jim Giusti, DOE-SR Pat McGuire, DOE-SR de’Lisa Carrico, DOE-SR Avery Hammett, DOE-SR Zachaery Todd, DOE-SR Thomas Johnson, DOE-SR Soni Blanco, DOE-SR Rich Olsen, DOE-SR Kristin Huber, SRNS Kim Cauthen, SRNS Bob Aylward, SRNS Susan Bell, SRNS Jesslyn Pearson, Time Solutions James Tanner, Time Solutions Tina Watson, Time Solutions Rick McLeod, SRS CRO	<u>Agency Liaisons</u> Trey Reed, SCDHEC Sandra Snyder, SCDHEC Duke Taylor, SCDHEC Kimberly Brinkley, SCDHEC  <u>Stakeholders</u> Art Domby Tom Clements Liz Goodson Bernice Johnson Howard Bill Lawless Nancy Bobbitt Joe Ortaldo Frank Redmond
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Welcome & Agenda Review

CAB Chair Harold Simon opened the meeting. He thanked the CAB members, Department of Energy – Savannah River (DOE-SR) employees, and members of the public for attending. He introduced CAB Facilitator, Tina Watson, who reviewed the Meeting Rules of Conduct. She stated a public comment period was scheduled for the end of the meeting. She reminded CAB members and meeting attendees to sign-in at the back table. She also reminded the CAB members to state their names before speaking before she reviewed the meeting agenda. She introduced Mrs. Jesslyn Pearson, Time Solutions, to begin her presentation.

Presentation: Work Plan Update – Jesslyn Pearson, Time Solutions

Mrs. Pearson provided a brief update on the CAB’s Work Plan by highlighting the topics each committee chair scheduled to be completed throughout the year. She discussed which Work Plan topics would be completed at the meeting as well as topics that would be completed at future Committee and Full Board meetings.

Facilities Disposition & Site Remediation (FD&SR) Committee Overview – Tom Barnes, Chair

CAB member Tom Barnes listed the FD&SR Committee members before announcing the next FD&SR Committee meeting was scheduled for October 13, 2015, at the New Ellenton Community Center in New Ellenton, SC. He emphasized participation at committee meetings and said he greatly appreciated his committee members attending. CAB member Barnes said a draft recommendation titled “Health Effect Reporting by the Savannah River Site”, which was tabled at the July Full Board meeting, would be discussed after the presentation. He then welcomed Mr. Bob Aylward, Savannah River Nuclear Solutions (SRNS), to begin his presentation.

Presentation: D-Area Ash Project – Bob Aylward, SRNS

Mr. Aylward said the purpose of his presentation was to fulfill a 2015 FD&SR Work Plan topic by providing an overview of the status of the D-Area ash project. He showed an aerial picture of the D-Area ash basins and landfill,

which was labeled with the various locations involved in the D-Area ash project. He explained how D-Area previously operated starting with the D-Area powerhouse, which was labeled “484-D Powerhouse.” He said the D-Area powerhouse was closed in 2012; however, the powerhouse burned coal for several decades. Mr. Aylward explained a byproduct of burning coal was ash and workers needed somewhere to put the ash as it accumulated. He described how workers slurried ash with water before sending the ash down an ash sluice line from the “Ash Sluicing Lines and Abandoned 484-D Sump Discharge (Overhead)” to inlet basins, which were labeled. He said the ash would enter the inlet basins and once the inlet basins were full, they would overflow into the “488-1D Industrial Waste Water Permit (IWT)” basin. He said from the 488-1D IWT basin, the ash would flow into the “488-2D (IWT).” Mr. Aylward said as ash filled up in the inlet basins, workers would gradually remove, dry, and place the ash in the solid waste landfill, which was labeled “488-4D Solid Waste Landfill Permit (SW).” He mentioned the 488-4D landfill was previously closed. Mr. Aylward explained the second part of the D-Area ash project involved the coal pile runoff basin, which was labeled “489-D Coal Pile Runoff Basin” on the aerial picture. Mr. Aylward described how the coal pile runoff basin involved a coal pile that water ran off before flowing through a storm sewer into the 489-D coal pile runoff basin. He mentioned 25 percent of the coal pile runoff basin was already closed; however, the remaining 75 percent of the 489-D coal pile runoff basin needed to be closed under the D-Area ash project. He provided more background information about the D-Area ash basins, 488-2D and 488-1D, and the landfill, 488-4D, stating they supported the operations of the D-Area powerhouse. He said the ash basins were permitted by Industrial Waste Water and Construction permits while the ash landfill was permitted under Class Two Solid Waste Landfill permit by South Carolina Department of Health and Environmental Control (SCDHEC). He mentioned the permits required closure 180 days after the powerhouse shutdown. He stated the D-Area coal pile runoff basin was partially closed in 2011 under the American Recovery and Reinvestment Act. Mr. Aylward also explained in 2011, the Environmental Protection Agency (EPA) and SCDHEC agreed to close the basins and landfill under the Federal Facility Agreement (FFA). He said DOE led negotiations to allow closure flexibility to meet potential budget forecasts and allowed closure to occur over five years instead of six months. Mr. Aylward said closure of the landfill and basins would be implemented through a series of removal actions and early final actions to accommodate the FFA milestone schedule. He stated the D-Area ash project included: 1) Dewatering and clean closure of the 488-2D Ash Basin; to remain open as a detention structure, 2) Geosynthetic cap installation over the 488-4D ash landfill, 3) Geosynthetic cap installation over the east end of the 488-1D ash basin, and 4) clean closure of the remaining portion of the 489-D coal pile runoff basin. He listed the original estimate for material requirements for the D-Area ash project. He said 277,000 cubic yards of compacted soil would be brought to SRS, which equaled approximately 25,570 truckloads. He stated 248,000 cubic yards of ash/contaminated soil needed to be consolidated or moved within the project site, which was equal to approximately 22,900 truckloads. Mr. Aylward said 41 acres/1.8 million square feet of geosynthetic material was needed for the geosynthetic clay liner and geosynthetic drainage layer. He stated the estimated cost of the project was 74.2 million dollars. He listed FFA removal action start milestones and said construction was estimated to be complete by 2019. He provided pictures of what the geosynthetic cover would look like as well as the project cover system for the project. Mr. Aylward summarized his presentation stating D-Area closure activities achieved an early start in September 2014 and closure activities included geosynthetic caps and clean closure of facilities. He said activities in 488-2D and 488-4D were well underway and removal actions for the coal pile runoff basin and 488-1D would begin in September 2015 and October 2016, with overall construction completion projected for 2019.

CAB member Dawn Gillas asked if the D-Area ash project was similar to the process used in commercial coal plants. Mr. Aylward said “yes and no,” and explained how workers who handled ash at D-Area were good at segregating ash, which he said was the less hazardous byproduct of the powerhouse. He explained that successfully segregating the ash provided the opportunity to perform a reasonable amount of closure activities. CAB member Gillas referenced slide 10 and asked Mr. Aylward if the groundwater level would be located below the ash. Mr. Aylward said the groundwater layer was several feet below the bottom of the landfill. He said once the basins were capped, and all the water was removed, the water table would actually drop due to a mounding effect.

CAB Vice Chair Nina Spinelli asked what method of long term maintenance would occur once the caps were in place. Mr. Aylward said long term maintenance involving the cover system would most likely involve regular inspections and repairs, if necessary. Mr. Aylward stated the D-Area ash project did not handle the groundwater in the area or other facilities like the powerhouse. He explained there would eventually be a D-Area operable unit that would address the powerhouse, coal pile remaining, and groundwater, but those activities would occur in another program.

CAB member Louie Chavis asked what long term residuals were of risk. Mr. Aylward said arsenic was the main driver for ash risk.

CAB member Susan Corbett asked how close the D-Area ash project was to a stream or water source. Mr. Aylward said there was a small tributary stream located not too far from the east end of the D-Area ash basin. He said the tributary was a “little ways away.” He said the small stream was located approximately 100 yards east of the D-Area ash basin; however, he pointed out that significant confirmation sampling had been conducted all around the basins to find out if there were any other materials that should be collected and consolidated.

CAB member Ed Sturcken asked how far the D-Area ash basins were located from the Savannah River. Mr. Aylward said the Savannah River was located approximately one quarter mile away; however, Mr. Aylward emphasized there had been no evidence that the material, over all these past years, was attributing to groundwater contamination.

CAB member Louis Walters asked if any other industry or companies were performing a similar ash cleanup like the activities being done in D-Area. Mr. Aylward said he felt the D-Area ash project seemed to be “ahead of the game” as far as handling ash. Mr. Aylward said he felt a majority of the industry was behind; however, he said he did not know of any other work being performed that was similar to the D-Area ash project.

Draft Recommendation Discussion: “Health Effect Reporting by the Savannah River Site”

CAB member Barnes read each of the five items in the draft recommendation before opening the floor for discussion. CAB Vice Chair Spinelli suggested changing “Pod” to “outreach” on item number two of the draft recommendation to make the recommendation more generic in case Information Pods were renamed in the future. CAB member Virginia Jones suggested changing a period to a comma on item number five of the draft recommendation.

Mr. Tom Clements, SRS Watch, referenced the Energy Employees Occupational Illness Compensation Program, which he said was administered by the Department of Labor. Mr. Clements mentioned there were thousands of claims from toxic and radiation exposure for SRS, mostly for past workers. Mr. Clements said he did not think the CAB had ever received a briefing about the Energy Employees Occupational Illness Compensation Program and he encouraged the CAB to request a presentation about the claims under that program.

Mr. Patrick McGuire, DOE-SR, addressed item number three of the draft recommendation stating he was uncertain what action the CAB expected from DOE. He explained the Department already felt the health and well-being of the community and environment was of the utmost concern as cleanup activities continued at SRS. CAB Vice Chair Spinelli said she remembered talking about item number three at the Committee meeting since other CAB members felt there was no action required of DOE. Mr. McGuire asked if the purpose of item number three was to simply be a positive statement and not an action. CAB Vice Chair Spinelli said “yes” and said there was not a specific action required for DOE, but rather item number three was a sentence DOE already agreed with and would most likely respond to by saying “We accept.” Mr. McGuire said he understood.

CAB member Gil Allensworth asked CAB Vice Chair Spinelli if item number three should be deleted since it had no action for DOE. CAB Vice Chair Spinelli said she felt item number three was nice to include since the public often addressed concerns about health and well-being. CAB Vice Chair Spinelli said item number three could be removed if the CAB wanted. CAB member Gillas said she agreed with CAB member Allensworth since usually the recommendations had concrete action for DOE and not a “yes we do understand” response. CAB member Gillas stated she agreed item number three of the recommendation should be deleted.

In order to keep item number three of the draft recommendation, CAB member Bob Doerr suggested changing “DOE understands” to “Ask DOE to make or provide a statement.” CAB member Daniel Kaminski said he agreed item number three should request an action from DOE, which he said would be accomplished by incorporating CAB member Doerr’s suggestion. CAB member Jones also agreed with CAB member Doerr’s suggestion.

Mr. Jim Giusti, DOE-SR, said DOE-SR could make a statement in the formal response if the recommendation was adopted; however, he did not know if making a statement would truly carry any weight. Mr. Giusti mentioned DOE-SR often said safety was the highest priority. Mr. Giusti stated CAB recommendations normally required action items from DOE-SR, but he said DOE could make a statement if that was what the CAB wanted.

CAB member Walters said he felt item number three should indicate that DOE-SR and the CAB both understood the public’s safety concerns. CAB member Walters did not provide an example for how to rewrite item number three, but he said the statement should be diplomatic not to condemn DOE-SR or undermine the concerns of the public.

Still discussing item number three of the draft recommendation, CAB Vice Chair Spinelli suggested changing “DOE understands” to “DOE continues to promote” followed by the rest of the sentence then adding “through their continued outreach activities” at the end. CAB member Gillas asked CAB Vice Chair Spinelli what action the CAB would expect DOE-SR to do. CAB Vice Chair Spinelli stated she would expect DOE-SR to respond by saying something “Thank you. DOE will continue to do our outreach.” CAB Vice Chair Spinelli said she felt the response would be a one sentence response. CAB member Allensworth repeated his opinion to delete item number three since he was worried the rest of the draft recommendation was getting lost to item number three.

CAB member David Hoel said he agreed with CAB members Allensworth and Gillas. CAB member Hoel stated item number three was unnecessary if all the CAB was looking for was a silly one sentence response from DOE saying the Department understood. CAB member Hoel said a one sentence response from DOE would not get the CAB anything

and was a useless exercise. He said the CAB should stay serious and delete item number three. He then suggested the CAB raise their hands in order to get a consensus about whether to keep or delete item number three.

Mr. Bill Lawless, public and former CAB member, commented he felt the draft recommendation was alarmist and did not recognize the good health of the employees at SRS. He also addressed the Energy Employees Occupational Illness Compensation Program, which he said was a program like the “gold rush” since the program provided a legal opportunity for anyone who worked at SRS, or other plants, to make an illness claim without any foundation. Mr. Lawless said the Centers for Disease Control (CDC) conducted a dose reconstruction study several years ago that concluded the health of people around SRS was better in the counties immediately adjacent to SRS than in counties further away from SRS. He mentioned how the Nuclear Regulatory Commission recently cancelled a field study, by the National Academy of Sciences, focused on studying health effects from nuclear reactors. He said the report stated the health of the people was completely independent whether a reactor was present or not. Mr. Lawless mentioned when he was a CAB member, a tritium study was completed by DOE and he explained the CAB decided to fund a separate independent study of tritium to be conducted by outside academics. He explained the CAB’s independent study revealed that the cancer of seven people were completely unrelated to the tritium facility at SRS. Mr. Lawless stated sunbathing was only factor the seven people with cancer had in common. He stated the current CAB did not recognize the good health of the people at SRS and were putting extra burdens on DOE by requesting the translation of work conducted by the Agency for Toxic Substances and Disease Registry (ATSDR.) Mr. Lawless commented the draft recommendation was uncalled for, redundant, and wasteful.

CAB member Susan Corbett said she felt the draft recommendation was not alarmist. She said she did not agree with Mr. Lawless’ statement since she had been watching the cancer registry in SC since the late 1980’s. CAB member Corbett said several international studies showed higher childhood leukemia rates around nuclear facilities in Europe. She said she also did not agree with Mr. Lawless that people that seek compensation for their illnesses related to service at SRS, or other plants, should be characterized as “gold diggers.” She said she felt people who were sick and had a good claim, who may have gotten sick working at SRS had the right to receive compensation. CAB member Corbett then said she felt item number three of the recommendation was useless.

CAB member Jones said she understood everyone’s feedback; however, she suggested shifting item number three down to the bottom.

CAB member Mary Weber agreed with CAB member Jones; however, CAB member Weber also suggested changing “understands” to “affirms.” She said item number three would then be asking for a positive statement, which would still require an action from DOE-SR. CAB member Barnes agreed with CAB member Weber’s suggestion. CAB Vice Chair Spinelli said to remove “That DOE” from the beginning of each item number. CAB member Barnes thanked everyone for their discussion and said he would like the draft recommendation to be voted on the following day.

#### Administrative & Outreach Committee (A&O) Committee Overview – Eleanor Hopson, Chair

CAB member Eleanor Hopson reviewed the Committee’s purpose before she listed the committee members. She said the CAB Membership Campaign was over for this year; however, she said the CAB Support Team accepted applications throughout the year. She said copies of the spring 2015 Board Beat Magazine were available online and she encouraged CAB members to make contributions to the Board Beat Magazine. She provided information for how to access the CAB’s Facebook page and website. She said there were no presentations scheduled for the committee; however, she said the A&O Committee would handle discussion for renewal of two position statements.

#### Position Statement Renewal Discussion: “The Savannah River Site Citizens Advisory Board’s Position on the President’s 2015 Budget Proposal”

CAB member Hopson opened up the floor for discussion of the position statement. Mr. Giusti said he did not know if renewing the position statement would accomplish very much since budget numbers in the position statement were incorrect and the position statement focused on the budget DOE-SR was already operating in. Mr. Giusti explained it could be more effective for the CAB to develop a position statement about what DOE-SR should consider with regard to funding priorities rather than having an annual budget position statement, since the annual budget numbers changed. Mr. Giusti explained by tying the position statement to a specific budget year, the CAB was limiting the position statement’s potential for future renewal.

Mr. McGuire also addressed the incorrect budget numbers within the position statement. He then referenced the statement “The Savannah River Citizen’s Advisory Board strongly believes that full funding should be restored to the Liquid Waste Cleanup program” and explained the position statement did not fully support the statement since other programs at SRS were consistently mentioned throughout the position statement. He suggested the CAB make the

position statement more consistent with the sentence he quoted from the last paragraph; however, he explained it was ultimately the CAB's decision about what to have position statements about.

CAB member Walters asked how long the position statement had been in place. Mr. McGuire said two years. Mr. McGuire also explained DOE-SR requested CAB input on the integrated priority list each year, which DOE-SR had done with the CAB for eight to ten years.

CAB Chair Simon said he felt the CAB should let the position statement expire since it is already 2015; however, the CAB could write another position statement about future budgets.

CAB member Hoel said the position statement up for renewal was useless and he said he agreed with Mr. Giusti, Mr. McGuire, and CAB Chair Simon. He said he felt the CAB should let the position statement expire. He said the CAB should concentrate on providing input regarding FY 2016 budget priorities in the upcoming year and getting more detail than last year versus only the information from the Project Baseline Summaries level.

CAB member Gillas said she also agreed with CAB member Hoel since there was roughly one week and a half left in FY 2015. She said if the CAB was going to do anything, the CAB should have a similar and more accurate position statement for FY 2017 since DOE-SR would hopefully receive a budget for FY 2016 soon. CAB member Gillas said the position statement should also focus on SRS priorities instead of the exact budget amounts.

CAB member Weber said since she was a new CAB member and did not know whether information within the position statement was still accurate, she could not vote to renew the position statement since she did not know exactly what went into its development. CAB member Weber said she felt the best thing would be to let the position statement expire was probably the best thing.

Mr. Clements said he agreed with a bulk of the comments and he did not understand how the CAB could renew the position statement since it was out dated. He said the CAB would look ridiculous if they renewed the position statement. Mr. Clements said he often referred back to things the CAB did; however, he said he would not reference this position statement if the CAB renewed it.

After all the discussion, it was decided that the CAB would vote the following day on whether to renew the position statement or to let it expire.

#### Position Statement Renewal Discussion: "Position Paper on Support of SRNL"

CAB member Hopson opened the floor for discussion of the next position statement. CAB member Doerr explained the position statement up for renewal was written for a specific purpose and time period. He said the CAB should not renew the position statement since it was no longer relevant. There was no further discussion. The CAB would vote the following day on whether to renew the position statement or to let it expire.

#### Strategic & Legacy Management (S&LM) Committee Overview – Bob Doerr, Chair

CAB member Bob Doerr listed the S&LM Committee members and reviewed the committee's purpose. He provided a recommendation status update; stating recommendations 323 and 331 were open. He mentioned the DOE response to recommendation 331 asked the CAB to select one of two options for future CAB meetings. He said he received some feedback from different CAB members; however, he said he planned to discuss each option at the upcoming committee meeting. However, CAB member Doerr asked Mr. Giusti to briefly comment to the CAB about fiscal and flexibility issues for the proposed meeting schedule and training that has been outlined in the DOE response.

Mr. Giusti said DOE-SR responded with two options and the CAB will need to choose one. He explained that the common denominator between both options was each option was within the CAB budget. Mr. Giusti mentioned he did not anticipate any future funding increase for the CAB beyond what it was currently receiving. Mr. Giusti explained DOE-SR analyzed the amount of money spent annually for CAB meetings and that was what DOE-SR used to evaluate the two options provided to the CAB. He said the online training program was currently being developed. He said the online training would be basic "101" video presentations with each video being approximately five to ten minutes long. He said a short quiz would be offered after the video to test knowledge of what was learned. Mr. Giusti said the videos would be generic enough to last three to four years without needing updating. He said overall DOE was thinking about doing 12 videos total, starting with four per year. Mr. Giusti said once the CAB decided on an option, DOE-SR would be able to implement the option in late FY 2016 and not have to wait to FY 2017.

CAB member Doerr announced the next S&LM Committee meeting was scheduled for October 13, 2015, from 4:30-6:20 at the New Ellenton Community Center. He then allowed CAB member Hoel to begin discussion of a draft recommendation titled, "Timely CAB Notification of SRS Unusual Events and Issues."

Draft Recommendation Discussion: "Timely CAB Notification of SRS Unusual Events and Issues"

CAB member Hoel reviewed the draft recommendation and said when he was drafting the recommendation he learned that recommendation 322, "Updates Provided to the Citizens Advisory Board at the Bi-Monthly Committee meetings and Via Email," which was adopted last September and was very similar to the recommendation he wrote. He said recommendation 322 recommended that DOE provide agency updates at bi-monthly Full Board meetings, committee meetings, and via email. CAB member Hoel commented DOE was providing those updates. However, he said he had not seen many email updates as things occurred at SRS, but he said the CAB had received news information. He said DOE-SR had continued to withhold timely notification to the CAB of important new or emerging issues and events relating to EM operations at SRS or elsewhere in the EM complex, sometimes by many months. CAB member Hoel said the recommendation requested that the CAB be specifically added to internal SRS notification processes to assure the CAB was notified in a timely matter. He referenced the discussion section of the draft recommendation and he mentioned notification procedures in the Site Environmental Protection Coordinator (SEPC) handbook and section five of the SRS Emergency Plan. He said section five provided information on notification processes and communication systems used if there was an unusual event or emergency at SRS. He explained notifications were sent to regulators, federal, state, local authorities, certain businesses, and the public. He stated sometimes information was provided quite timely, within 15 minutes to an hour, depending on the categorization of the event; however, currently, there was not a provision to notify the CAB in the SEPC handbook or the SRS Emergency Plan. CAB member Hoel stated the recommendation was requesting DOE revise the SRS Emergency Plan to include notification of the CAB Chair of any unusual event or emergency that triggered implementation of section five of the Emergency Plan. He then read each item number of the draft recommendation. CAB member Hoel said he felt an asterisk should be added next to the words "CAB Chair" which should be linked to a footnote that said if the CAB Chair was unavailable to notify the CAB Vice Chair. He then asked if any CAB members had any comments.

CAB member Jones said she supported the draft recommendation since there were several times she learned from a newspaper article that a group of dignitaries was visiting SRS. She also said she thought it would be helpful to add an asterisk in the recommendation that would allow the Vice Chair to be notified if the CAB Chair was unavailable. CAB member Doerr agreed with CAB member Jones' suggestion.

CAB member Allensworth said he did not know about the SEPC Handbook before. He said in an emergency situation, he felt the CAB was simply an advisory board and he did not know if the CAB qualified for that level of information in an emergency situation we qualify for that level of information. He explained that he thought it would be great for the CAB Chair to receive information, but he did not want DOE to be worried about tracking down the CAB Chair or Vice Chair in an emergency situation.

CAB Vice Chair Spinelli said she agreed with CAB member Allensworth that the draft recommendation may put the CAB in a different position, being an advisory board, but she said she thought item numbers three and four were the CAB's scope. She suggested deleting item numbers one and two and keeping three and four.

CAB member Corbett said she supported the draft recommendation. She said the CAB represented the public and she had several community people who knew she served on the CAB, who might look to her if something occurred at SRS. CAB member Corbett said she felt item numbers three and four of the recommendation were important because when important people visit SRS, the CAB should have an opportunity to meet with the visitors as representatives of the public. She said the draft recommendation helped the CAB be more aware of things occurring at SRS.

CAB member Hoel explained that the SEPC handbook and the Emergency Plan had a categorization of events for emergencies at SRS and those categorizations determined how soon someone was notified. He mentioned there were employees at SRS that who were responsible to make notifications.

Mr. Giusti said when the original recommendation was made to provide updates he told the CAB there would be situations when the CAB found out about events at SRS through other media outlets. He said there were other sources for release of information, that in many cases were routine and get reported in a weekly report somewhere, then someone happens to see it and they write a story about it. Mr. Giusti explained that in those situations he provides and immediate response, which he said the CAB would not be copied on because those situations were phone calls from the media to the Office of External Affairs. Mr. Giusti explained that currently DOE-SR was already doing what the CAB requested in item number three because whenever DOE has an important visitor coming to SRS, that has any public interaction, the CAB Chair and Vice Chair were invited. Mr. Giusti explained there were situations when important visitors came to SRS but did not have any stakeholder interactions, which meant the CAB would not be notified of that program visit. Mr. Giusti said there would be times when the CAB would not be able to receive

information as quickly as they wanted; however, he encouraged the CAB members to get a Facebook and Twitter account because those social media methods were how communication was occurring fastest in today's society. He explained that when issues occur at SRS he was often on the phone with DOE-HQ talking about the situation with necessary people, not making courtesy notifications. He said he understood the CAB's frustration but DOE was really trying to provide the CAB as much information as possible. He reminded the CAB they were a public organization, which required everything they received to be cleared for public release.

Mr. McGuire said the CAB could recommend whatever it wanted to DOE; however, he said generally, DOE notified people of unusual events and emergencies because those people had certain actions to take such as setting up roadblocks or issue evacuations. He explained those people were "actionable agencies" and unfortunately the CAB was not an actionable agency, which meant the CAB was not in the chain to take action with respect to an unusual event. He told CAB member Hoel he was correct that there were courtesy notifications and things for information. Mr. McGuire commented that the CAB received information, again as an advisory board, and any discussions the CAB committee members have should be held in a public forum. He explained there were times when good information was provided to the CAB, but while it was good information, if CAB members were discussing information provided by DOE, that discussion needed to be held in a public forum, such as a CAB Full Board meeting. He repeated what Mr. Giusti said that DOE was trying to provide as much information to the CAB as possible; however, he reminded the CAB they were an advisory board not an actionable board.

CAB Vice Chair Spinelli stated she reread the CAB's mission statement again and she felt item numbers three and four were covered; however, she felt item numbers one and two are a little past the CAB's scope. She said recommendation 322, covered what item numbers one and two were requesting.

CAB member Hoel said he was recently asked for examples of instances that caused him to draft the recommendation. He discussed the agitator incident in H-Canyon, which occurred in February and due to a question asked by a CAB member, the CAB was not informed about the agitator incident until April. He said the second example was the mercury issues in the Liquid Waste system, which he felt SRS knew about since October 2014. CAB member Hoel said the CAB was not informed about the mercury issue until March 2015 and again only because a CAB member asked about it, not because the CAB received an update, an email, notification from DOE.

Mr. McGuire said CAB member Hoel's statements were true; however, he said he felt DOE-SR had improved by providing monthly updates at the committee meetings. Mr. McGuire said he agreed that DOE-SR should have informed the CAB in a timelier manner.

CAB member Allensworth said he appreciated the insight from DOE and stated the CAB should trust DOE that they will provide information in a timelier manner.

There was no further discussion about the draft recommendation; however, CAB member Doerr said he would like the draft recommendation to be forwarded to the Full Board on the next day. CAB member Doerr then welcomed Mr. Rick McLeod, Savannah River Site Community Reuse Organization (CRO), to begin his presentation.

Presentation: SRS Community Reuse Organization – Rick McLeod, SRSCRO

Mr. McLeod said the purpose of his presentation was to fulfill a 2015 S&LM Work Plan topic by providing an overview of the SRS CRO. He explained that Section 3161 of the Defense Authorization Act of 1993 initiated the creation of Community Reuse Organizations (CRO) across the United States in response to the negative social and economic impacts of workforce restructuring (WFR). Mr. McLeod mentioned DOE made a commitment to provide financial assistance for economic development and site reuse activities developed by the affected communities. He said there were 15 CRO's formed across the country; however, today there were only eight. He showed a graph of the SRS headcount and WFR. He provided more background information about the SRS CRO, which he said was a 22-person board, a private non-profit, covering Aiken, Allendale, Barnwell, Columbia and Richmond counties. He provided background information on the SRSCRO before discussing focus areas of economic development, workforce, and community voice. He showed pictures of some of the excess assets SRS CRO received from SRS. He said the CRO could use excess property to attract industry to the five-county area. He explained that recently the SRS CRO started the removal of pipeline. He explained the SRS CRO was an organization under a real estate license which meant DOE allowed the CRO to take control of that piece of property and remove the physical assets and make them into personal property and sell them to create dollars. He said the CRO was working on a new asset for services project to remove trailers from SRS. Mr. McLeod stated the CRO conducted a pilot and actually tried to resell the trailers, but there was not much profit margin in trailers so CRO was now working to dispose the trailers and in return getting assets from the SRS to do the demolition and disposal of the trailers. He provided a chart to discuss what the CRO was spending in the five-county area. He said the blip in the chart was the railroad and the pipeline project. Mr. McLeod listed various SRS CRO program investments before discussing SRS CRO's education philosophy. He mentioned SRS was a viable economic engine for the local area before he discussed the Nuclear Workforce Initiative, which addressed

timely education and training programs, nuclear industry perceptions, misconceptions about nuclear jobs, and maintaining workforce focus in changing budget situations. Mr. McLeod discussed different grants, the Nuclear in Action program, a 2015 Regional Workforce Study. He explained many of the programs did not exist or were enhanced by the grant SRS CRO received from DOE. He said the SRS CRO was seeing peaks in the five new degree programs. He said 604 students were enrolled and 3,200 students were focusing on science, technology, engineering, and math (STEM) programs. He mentioned SRS CRO was trying to reach out to students at an earlier age to get them involved in STEM. Mr. McLeod discussed National Science Week, which was scheduled for October 19-23, 2015. He said SRS CRO was just beginning to look at regional workforce in a broad sense to try and get enough future students to bring them to SRS and keep them in the local area; however, he said this issue was an industry-wide problem. He provided pictures of various SRS CRO events before stating the SRS CRO was a toolbox for the public and regional economic developers.

CAB member Walters asked if SRS CRO matched any funding or the property that Unisys brought in. Mr. McLeod said SRS CRO did not get into matching funds; however, SRS CRO did try to give them furniture from the Site, but Unisys was not impressed with the state of the furniture and returned the furniture to SRS.

#### Waste Management (WM) Committee Overview – Earl Sheppard, Chair

CAB member Sheppard reviewed the WM Committee's purpose before listing the committee members. He provided a recommendation status update, stating the WM Committee had no open, pending, or draft recommendations. He announced the next WM Committee meeting was scheduled for October 6, 2015, at the New Ellenton Community Center in New Ellenton, SC. CAB member Sheppard said no presentations were scheduled for that day; however, he said a presentation about the project status of the Salt Waste Processing Facility was scheduled for the next day.

#### Nuclear Materials (NM) Committee Overview – Larry Powell, Chair

CAB member Larry Powell listed the NM Committee members before he reviewed the committee's purpose. He provided a recommendation status update, stating recommendation 330 was open; however, the NM Committee had no pending or draft recommendations. He announced the next NM Committee meeting was scheduled for October 6, 2015, at the New Ellenton Community Center in New Ellenton, SC.

Mr. McGuire provided a comment relative to the draft recommendation titled "Timely CAB Notification of SRS Unusual Events and Issues" stating the NM Committee, as well as the rest of the CAB, received an update of the event that occurred in HB-Line that caused the SRS to go into an operational pause the week before last. Mr. McGuire informed the CAB that Mr. Jack Craig, SRS Manager, as well as Ms. Carol Johnson, President of Savannah River Nuclear Solutions, would be attending the Full Board meeting the next day to address any concerns related to the operational pause.

CAB member Gillas shared her opinion stating that things that fed into operational pauses were associated with safety basis' and the whole process required to change a safety basis. CAB member Gillas suggested having a future presentation about why it took so long to change safety basis' and how safety basis' fit into situations as they occur. Mr. McGuire said that was something DOE-SR could possibly discuss in February 2016 to be considered for inclusion in the NM Committee 2016 Work Plan.

#### Public Comments

Mr. Lawless, public, said the CAB member who felt he should not question the health claims led him to the website where the Radiation Exposure Compensation Act was listed. He read a few sentences from the Radiation Exposure Compensation Act and explained that if someone had a disease that fit into a category of a compensable disease, that individual could be compensated without establishing a causal connection. Mr. Lawless also commented about the foreign fuels stating he was pleased DOE-SR continued to take foreign fuel at SRS. He said he noticed in the Augusta Chronicle on September 15, 2015, there was an article about DOE taking highly enriched uranium (HEU) from Switzerland. He said he liked the article because it honored promises made over the years to different nations, helped keep jobs at SRS, and it improved the environment and safety of the planet. He also recommended SRS ship its "low heat" vitrified High Level Waste to the Waste Isolation Pilot Plant and he suggested the CAB consider recommending DOE-SR continue accepting foreign fuels.

Ms. Bernice Johnson Howard, Georgia Women's Actions for New Directions, thanked the CAB members for all their hard work. She stated she was a resident of Shell Bluff, GA who was fighting for people who may be affected by cancers related to SRS and other industries in the local area. Ms. Johnson Howard mentioned she was offended by earlier comments from an earlier speaker. She said individuals impacted by cancer or people who had lost loved ones to cancer were not "gold diggers." She stated she also took offense to the statement of cancers being "little." She said



being an African American living in Shell Bluff, any cancers related to people in her area were not related to sunbathing. She stated cancer had risen from 17 percent below about 20 years ago to 27 percent above. She said she felt speakers who made public comments should be mindful and respectful of the opinions of others. She provided a report on the work being done in relation to CAB recommendation 317 stating there had been increased momentum in the continued implementation of recommendation 317. She explained that representatives of GAWAND had a meeting with the SRS Manager, Jack Craig. She said they also had more conversations with Dr. Gene Rhodes, Director of Savannah River Ecology Laboratory (SREL). She said GAWAND would provide a more detailed report the following day.

Mr. Tom Clements said he was the Director of SRS Watch, which was a small public interest group that received funding from the Springs Foundation, the Guacamole Fund, Aria Foundation, and other small donations. Mr. Clements, who was holding his laptop at the microphone, stated he was looking at the website for the Energy Employees Occupational Illness Compensation Program. He encouraged the CAB to be informed about the program since it looked like 20,000 claims were from SRS. He said he wondered if the Department of Labor could inform the CAB about the program. He addressed what he called a "combination of issues" and asked if the CAB and public were being informed about things such as the recent shipment of German low enriched uranium spent fuel and the Swiss highly enriched spent fuel. He said he posted information about the shipments on the SRS Watch Facebook page and encouraged the CAB to go to the SRS Watch website and Facebook page. He said he could post much more information about what was going on and keep you informed, but he commented that his abilities were limited. He reference the shipments he mentioned above and said he engaged with DOE and the Swiss government, but they would not say anything so he posted a blog he wrote for the International Panel on Fissile Materials (IPFM) on September 15, 2015, saying that German LEU from a research reactor in Berlin, Germany had come to SRS along with the Swiss HEU. He said the day after he posted his blog, NNSA responded by sending something out to the media. Mr. Clements stated he was pleased a public interest group stimulated NNSA to make a statement. Mr. Clements commented that the CAB should be informed about the materials coming into SRS. Mr. Clements addressed H-Canyon stating he looked forward to the presentation the following day. He said the two problems resulting in the shutdown of H-Canyon HB-Line related to preparation of plutonium oxide for MOX fuel. He said the MOX Program had been totally mismanaged, was over budget, and underfunded and was barely surviving. He referenced the poster he had on the table outside about the German graphite spent fuel import. He stated he met with German state officials, North Rhine-Westphalia, and various federal German agencies that managed nuclear issues when he visited Germany in July. He said he had a very interesting interchange about their perception about SRS and what they thought of disposing the material. He said he would not go into detail about what he learned, but he mentioned he was still in contact with those German officials and he was making sure they were fully informed of what DOE was doing on the issue. He mentioned there would be an update by Ms. Maxcine Maxted, DOE-SR, in October. He said he was interested to hear about the proposal to construct a "220 million euro facility for temporary storage of this material in Germany." Mr. Clements said if the material was shipped here and H-Canyon went down or they were unable to reprocess it, he would want to see the Environmental Impact Statement for an equivalent facility at SRS. He said he was traveling to New Mexico the following week and would be touring WIPP and Los Alamos National Laboratory to talk about EM Programs. He thanked the CAB for all their work and continuing to engage the public about all SRS issues. A copy of Mr. Clements blog post has been attached to this document.

~Meeting adjourned

All presentations are available for review on the SRS CAB's website: [cab.srs.gov](http://cab.srs.gov)

Meeting Minutes  
Savannah River Site Citizens Advisory Board (CAB) – Full Board Meeting  
New Ellenton, South Carolina (SC)  
September 22, 2015

Tuesday, September 22, 2015 Attendance:

<u>CAB</u> Gil Allensworth Tom Barnes Andrew Bush – <i>Absent</i> Louie Chavis Susan Corbett Robert Doerr Murlene Ennis – <i>Absent</i> Dawn Gillas David Hoel Eleanor Hopson Virginia Jones Daniel Kaminski John McMichael – <i>Absent</i> Clint Nangle Larry Powell Bill Rhoten Earl Sheppard Harold Simon George Snyder Nina Spinelli James Streeter Ed Sturcken Christopher Timmers Louis Walters – <i>Absent</i> Mary Weber	<u>DOE/Contractors</u> Jack Craig, DOE-SR Terry Spears, DOE-SR Thomas Johnson, DOE-SR Rich Olsen, DOE-SR Jim Folk, DOE-SR Pat McGuire, DOE-SR Avery Hammett, DOE-SR Zach Todd, DOE-SR Maxcine Maxted, DOE-SR Jim Giusti, DOE-SR de'Lisa Carrico, DOE-SR Allen Gunter, DOE-SR Terry Provost, DOE-SR Pam Marks, DOE-SR Lucy Knowles, DOE-SR Carol Johnson, SRNS Kim Cauthen, SRNS Kristin Huber, SRNS Jay Johnson, SRNS Jeff Allender, SRNL Stuart MacVean, SRR Mark Schmitz, SRR Melissa Johnson, Time Solutions Jesslyn Pearson, Time Solutions James Tanner, Time Solutions Tina Watson, Time Solutions	<u>Agency Liaisons</u> Trey Reed, SCDHEC Shelly Wilson, SCDHEC Heather Cathcart, SCDHEC Susan Fulmer, SCDHEC Sandra Snyder, SCDHEC Rob Pope, EPA  <u>Stakeholders</u> Cee Cee Anderson Che Long Bernice Howard Johnson Nancy Bobbitt Frank Redmond Tom Clements Tom Coleman C. Wie
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CAB Chair Opening and Update – Harold Simon, CAB

CAB Chair Harold Simon opened the meeting before leading everyone in the Pledge of Allegiance. He welcomed everyone to the meeting and called for discussion of the May Full Board meeting minutes. There were no suggestions or comments regarding the minutes. He opened the floor for a vote; the CAB, with no opposition and no abstentions, approved the meeting minutes with 21 votes. CAB Chair Simon then called for a discussion of the July Full Board meeting minutes. There were no suggestions or comments regarding the minutes. He opened the floor for a vote; the CAB, with no opposition and no abstentions, approved the meeting minutes with 21 votes.

CAB Chair Simon welcomed everyone to the meeting, including the new SRS Manager, Mr. Jack Craig. He reminded everyone the Full Board meeting was more formal and served as the CAB's official business day. CAB Chair Simon then welcomed CAB DDFO Pat McGuire.

He referenced the CAB Online Training Program, which the CAB Support Team was currently developing in order to provide CAB and public with training videos to refresh their memory of SRS operations. He pointed out that, although there is no requirement that Board members have technical knowledge, he feels it important that there be some type of training in place for the members to bring them up to speed and help them understand the basics of what the CAB is about.

CAB Chair Simon then discussed the EMSSAB Chairs' Meeting topics from the fall meeting. He referenced Recommendation 317, to fund a Georgia independent monitoring program. The DOE did not accept the recommendation; however, DOE-SR requested an evaluation by the Savannah River Ecology Laboratory (SREL). SREL recommended that DOE-SR consider developing a strategy that incorporates monitoring data that can help local residents draw their own conclusions concerning health risks. SREL has engaged with GA Women's Action for New Direction (GA WAND) to assist them in obtaining sound logical information on radionuclides and risks

associated with those radionuclides. Dr. Rhodes updated CAB Chair Simon on the status of their outreach with GA WAND prior to CAB Chair Simon leaving for the EM SSAB Chairs' Meeting in Santa Fe.

CAB Chair Simon discussed the Student Involvement Program as the activity presented at the EM SSAB Chairs' Meeting in Santa Fe. SRS CAB does not have a full-fledged program but is working toward that through Dr. Hopson, Chair, Administrative & Outreach Committee. The Administrative & Outreach Committee held a conference call with the CAB Chair, CAB Support Team, and Ms. Mindy Metz, Savannah River Site Community Reuse Organization (SRSCRO). The CAB has been invited to participate in the STEM Career Day on October 22, 2015. This will allow the CAB to meet with educators and to reach out to high school students regarding the Student Involvement Program.

CAB Chair Simon gave an update on the Waste Isolation Pilot Plant (WIPP) as provided by Frank Marcinowski, Deputy Assistant Secretary for Waste Management. CAB Chair Simon stated that it was premature in the recovery process to predict the rate that Transuranic (TRU) Waste will be shipped to WIPP. The initial focus will be on waste generated during the recovery and in placement of waste currently stored in the WIPP storage facility. The timing for resumption of shipment from off-site currently is uncertain and will be based on a variety of factors. Savannah River TRU Waste is being safely stored pending resumption of WIPP acceptance. Interim and supplemental ventilation system will be completed by early 2016.

CAB Chair Simon presented on the EMSSAB Chairs' product development, the proposed recommendation on Supplemental Environmental Projects (SEP).

He then allowed CAB Facilitator, Tina Watson, to review the Meeting Rules of Conduct and meeting agenda. She reminded CAB members and meeting attendees to sign the attendance sheets on the back table. She said public comment periods were scheduled throughout the meeting and she encouraged the public to sign up to speak at the back table. She asked everyone to place cell phones and pagers on silent. She then called on Jack Craig, DOE-SR to present the DOE Update.

### Agency Updates

Mr. Jack Craig, SRS Manager, Department of Energy – Savannah River (DOE-SR)

Mr. Jack Craig introduced himself and stated he was excited to be here today. He stated he has been at Savannah River now almost three months and hit the ground running and looks forward to working with the CAB. He has some experience working with CABs from the late 1990s at Fernald, where he was Site Manager and involved with establishing and working with DOE's first Citizens Advisory Board. He reports that Fernald was successfully closed in 2006 and cleanup would not have been successful without working with the CAB. Understands that members are all volunteers, but it is an important part of the cleanup work. As Mr. Simon said, he has been here before; he was here in 2010 for about seven months as the acting Manager of Savannah River Site, prior to Dr. Moody. Mr. Craig has been with the department for about 27 years; he has been to about half a dozen EM sites in the field; he spent all of 2014 working at Headquarters and was there when the WIPP event occurred, so he was involved in WIPP recovery. Mr. Craig believes there are two essential ingredients to getting work done in the field: contractor team has to demand excellence in mission execution and safety, but there also needs to be an effective public outreach process in working with the CABs, general public, congressional staff, and regulators. He is committed to both of those and looks forward to working with the CAB.

Mr. Jack Craig updated on Nuclear Materials. There was an operational pause of activities on the site by Savannah River Nuclear Solutions (SRNS) because of an event that happened on September 3, 2015. That event had to do with nuclear operations and movement of material that was not done according to procedure. These were very important criticality procedures and, although we did not have an actual safety event, it could have, and with the importance of procedure compliance and conduct of operations, SRNS made the right decision to suspend operations (operational pause). SRNS suspended not just Nuclear Material work, but all work on site that was under their control. That pause remains in effect for the most part; DOE has a plan from SRNS that we have agreed with on how to restart activities. It would be in a phase process starting with the less hazardous work first and working their way up to nuclear operations. Carol Johnson, SRNS, is here today to answer questions about the operational pause if needed. They are in agreement, there was a serious issue here and SRNS took effective action and they are working through the restart process.

H-canyon chemical separation facility continues readiness assessments for portions of spent fuel processing which will purify and separate uranium from the fission products and other waste materials. These assessments are expected to continue in early Fiscal Year 2016.

CAB Chair Simon mentioned the operational readiness reviews at WIPP and that is a precursor for starting their activities. Whether it is a readiness assessment, which is actually a contractor operated review, or an operational readiness review, which is actually a DOE review, those are two processes that are used to restart operations once they are suspended.

In August SRNS was directed by DOE to develop a corrective action plan regarding preparation and conduct of readiness assessments. This SRNS corrective action plan addresses recent findings of improper classification of identified issues, inadequate closure of prestart items, repeat issues of conduct of operations and training and qualification issues from prior reviews. This corrective action plan is currently under review by DOE.

H-canyon continues to work on modifications to receive the Canadian liquid target residue materials, which resulted from processing of medical isotope targets in Canada. The processing of Canadian liquid target residue material liquid will generate less than one full canister of Defense Waste Processing Facility (DWPF) glass waste.

H-B Line is processing plutonium feed material for the mixed oxide fuel fabrication facility, or MOX plant. H-B restarted processing plutonium for feed material to MOX on August 3, 2015.

A readiness assessment in building 235-F to allow refurbishment of gloveboxes has been successfully completed. SRNS has begun risk reduction activities in 235-F which includes draining of hot cell windows, removal of outer glass, and reestablishment of lighting. The work will allow SRNS to obtain a better characterization of the material within the hot cell which will allow us to proceed with the decontamination activities in that facility.

K-Area continues destructive examination of 3013 plutonium containers to ensure the plutonium is safely stored. K-Area continues to support shipment of 3013 containers to H-B Line for processing.

In L-Area, SRNS has successfully completed the readiness assessment to allow operation of the new shielded transfer system, which will allow for the receipt of the Canadian fuel within L-Basin.

SRNS continues to support spent fuel receipts from foreign and domestic research reactors along with spent fuel shipments to H-Canyon for processing.

In the area of environmental cleanup, at the D-Area Ash Project, the subcontractor, Envirocon, has completed ash consolidation from the 488-D2 ash basin to the 488-4D ash landfill. The surface is being prepared for the installation of a 21-acre geosynthetic cover. The geosynthetic installation is scheduled to begin in October, 2015.

The silver chloride injection campaign has been completed at the F-Area hazardous waste management facility. Silver chloride is used in the F-Area groundwater to reduce migration of iodine-129 to the Four Mile Branch. Silver chloride injection began on June 1, 2015 and was completed on July 20, 2015.

SRNS completed an additional injection of edible oils into the TNX groundwater. Edible oil is used to treat VOC compounds in the groundwater. The use of this passive technology provides a considerable cost savings over the restart of additional air strippers.

In the liquid waste area, Tank 16 grouting operations were started June 2, 2015 and they were completed yesterday. Tank 16 was filled with a grout material and was the seventh tank closed on site successfully. Field activities for the preparation of Tank 12 grouting were completed yesterday also, meeting a regulatory commitment date of September 30, 2015. The Tank 12 Closure Module Addendum public comment period is expected to start on October 19, 2015 and run through November 17, 2015. A public meeting on the Tank 12 Closure Module Addendum is scheduled at the Aiken Design Center on Wednesday, November 4, 2015 at 6:00 p.m. DOE agreed to pursue commercial sources for tank waste treatment by July 31, 2015 under an agreement reached in April with the South Carolina Department of Health and Environmental Control (SCDHEC) and the U.S. Environmental Protection Agency (EPA) which extended closure dates for two Savannah River tanks. In early June, the liquid waste contractor, Savannah River Remediation (SRR), released a request for interest and held an industry day seeking companies to remove cesium from a waste tank. A request for proposal specific to Tank 10 was released on August 13, 2015 with proposals due yesterday. Those proposals are currently under evaluation. The Department will meet with DHEC and the EPA in the next few weeks to discuss the results of the effort and this effort does not impact the startup of the Salt Waste Processing Facility (SWPF).

The Defense Waste Processing Facility (DWPF) resumed operations yesterday. For the Fiscal Year, DWPF has poured 90 canisters of vitrified waste and will likely pour about 100 canisters to bring the total number of canisters produced

to 3,977 of a total of 8,582 that are expected in total. The facility has poured more than 15 million pounds of glass to date and we are looking forward to pouring the 4,000<sup>th</sup> canister later this calendar year.

The Saltstone Facility is currently in an outage period that is expected to last through November. The processing facility will use the outage time to perform inspection of maintenance activities on the grout line, grout pump, and dry feed systems. Saltstone processed 828,000 gallons of low level waste this Fiscal Year. The interim salt waste processing unit consisting of the ARPMCU process treats salt solutions, which represents 93% of our waste currently in inventory. The next generation solvent is achieving a much higher level of cesium removal than previous solvents; it is 200 times more efficient. The interim system now achieves a 99.99% removal of cesium and has processed almost 753,000 gallons this Fiscal Year. Once the salt waste is decontaminated, the majority of this volume is processed in saltstone for final disposition. In saltstone, the first mega decontaminated salt solution disposal unit, which we call SDU6, is being built at Savannah River and is almost 70% complete. This disposal cell construction will be completed this month and the water tightness testing will begin in October, 2015. Infrastructure to connect the disposal cell to the saltstone processing facility is currently under modification. SDU6 will hold over 30,000,000 gallons, more than 10 times the size of the current SDUs, and presents a significant cost savings. Plans are to build seven of these units for decontaminated salt solution disposal from future salt waste processing.

The Salt Waste Processing Facility (SWPF) construction is about 89% complete and currently ahead of schedule. Construction completion is scheduled for December 2016 with radioactive waste operations targeted to begin in December 2018.

For the budget outlook, it does not look like we will have a budget as of October 1, 2015 and we have been planning several scenarios to execute our work starting in FY16. Those planning activities include what we call a continuing resolution (CR), which looks like how we are going to get our funding as we kickoff 2016. We are looking at either a 30-day continuing resolution or a one quarter, or 3-month, continuing resolution. Under that process, we are essentially allocated 1/12 of the budget, month-by-month throughout the year until Congress passes a budget. We do not know what this CR will be or the length of time so we are doing various planning scenarios. Under all scenarios we have been asked to look at, we do not see an impact to site operations through the first quarter of the year. If the continuing resolution lasts longer than that then we will see an impact and we are looking at those impacts. There has also been some discussion of a potential government shutdown if we do not have a budget or a continuing resolution by October 1, 2015 so we are also having to do planning exercises to see how we would execute the min safe activities onsite if we are without a budget.

The next SRS Information POD will be Wednesday, October 28, 2015 at the Center for Engineering and Advanced Manufacturing on the campus of Aiken Technical College from 10:00 a.m. until noon. This event is co-sponsored by the University of South Carolina-Aiken and Aiken Technical College. This event will consist of four PODs with the following topics: nuclear materials management; waste management; environmental monitoring and restoration; as well as the Savannah River National Laboratory. Each presentation will last approximately 45 minutes allowing participants to attend two of the four sessions. Registration and exhibits for this event will begin at 8:30 a.m. The event is free of charge. Registration for this event is on a first-come-first-served basis.

There will be a public notice coming out at noon today on contracting. We operate all our activities on Savannah River Site under four major contracts: the Savannah River Nuclear Solutions contract; the Savannah River Remediation contract; the Centerra (security) contract; and the Salt Waste Processing Facility construction contract. All of those contracts will be up or expire within the next 4 to 5 years. The first one to expire is the liquid waste contract so we will be doing some planning for the recompetition for that contract and there will be what is called an industry day where interested contractors are invited to the site for presentations, tours, and one-on-one meetings as we prepare to undergo that procurement. The request for information will be out today and the industry day will be held the week of October 12, 2015.

Mr. Rob Pope, Environmental Protection Agency (EPA)

For those of you that haven't met me, my name is Rob Pope. I haven't made the last couple of meetings; either Deidre Lloyd, who is another project manager, has been here or, at the last CAB we actually had multiple conflicts going on and were unable to attend. I'm the FFA Project Manager for Region IV Atlanta, so I'm out of the Atlanta office. We have a team of four project managers that work on Savannah River Site on the cleanup. We work exclusively on the tanks and the soil and groundwater cleanup. We have no involvement on the nuclear materials side of the house; that is something that the EPA is not authorized to work on under any of our statutes. The folks that have been on the CAB for awhile know that we have been going through a reorganization in our agency in our region. Through that reorganization we have actually dissolved our federal facilities branch which worked on all the federal facilities across the region and have been absorbed into the branches that work on the private superfund sites. We have one group of

us that work on DOE sites and one group that work on DOD sites. A number of the project managers that worked on federal facilities have also picked up private work or additional things. I am now also the technical lead for Tindall Air Force Base near Panama City, Florida, where I have another team down there. My time is now split more than it has been in the past. You will likely meet Jennifer Tufts in the next few CAB meetings. She was previously working on Paducah so she knows DOE and the issues we often work with.

EPA is very pleased with the way the work is progressing in D-Area. It has been an area that we have pushed DOE to go ahead and address because we feel that it is at the edge of the site and if the ash were to get out of the basins, it is right there at a wetlands, in the Savannah River Flood plain, so we feel that is an area that now that the power house has been shut down needs to be addressed as soon as possible.

Tank 16 was one of the tanks involved in a dispute where DOE asked to have time extended to close Tank 16. As a resolution of that dispute, Tank 16 was given some extra time to close. It is nice to find out that the grouting was completed yesterday, so they really didn't even need those extra days. Kudos to DHEC, DOE and EPA working together to move the documents forward and also to the contractor for working around the clock to get the tank grouted. In my mind that is actually a big success for all three agencies.

Mr. Craig went over the numbers on how many canisters are going to be produced, how many gallons of liquid waste they are going to treat this year and in EPA's mind that is a much reduced number than what they have been able to do in the past and is mainly due to a lack of funding. This is a recurring theme and EPA is very concerned about this and I am sure South Carolina is also concerned about this. It is a problem that funding for that type of work has been reduced from Congress in all of our budgets so we are constantly pushing DOE to go after more funding, working with the State and with DOE to see how to make things as efficient as possible to utilize the funding that is available as efficiently as possible. We want to make sure the CAB understands and the public understands that to get the work done in a more timely fashion and to address these risks in a more timely fashion, more funding needs to become available.

It is likely that EPA will not make all of the CAB meetings this Fiscal Year. Our travel budget has been cut along with all kinds of other funding. With this one, I had a project meeting on site yesterday and stay over and attend this meeting today. That will be the model for the future; as we can get project meetings to line up with CAB meetings, then that travel will be fine, but if there is a CAB meeting that falls out there and we don't have a project meeting going on, it will be difficult for us to make it.

In the near future, there is an active remedy ongoing in A-Area. An older system that is a sole vapor extraction system dealing with chlorinated solvents in the ground. That system is very effective, it has drawn many pounds of chlorinated solvents from the ground and at this point DOE has asked if that system can be turned into a passive system, which will still withdraw the contaminants, but at a lower rate. The active system uses diesel to run and a pump to suck it out of the ground, is no longer getting good results, but a passive system would use a lot less energy and get about the same results. That would mean using less energy and be a much "greener" remedy. That is something that the EPA and South Carolina have been looking at and think is possible and will go forward in the near future.

Mr. Craig also mentioned the edible oil injections in the T&X groundwater area. That has been great; we think that is a great remedy. There have been many remedies used at T&X and that is kind of a polishing step and we think that has been going well. They did that as a step study a couple of years ago and it worked so well that we worked it into the final remedy.

DOE and EPA and, when possible, SCDHEC, have worked together to do what we call Environmental Justice meetings that are outside of the CAB meetings. They are more casual and we reach out to different community partners to try and organize these meetings. As our fundings have been reduced, we have had fewer of those meetings this year. There is one coming up on November 19, 2015 at the New Ellenton Community Center. EPA will take the lead on this one. More information will go out to the CAB and the public about that.

CAB Vice Chair Spinelli asked what time the Environmental Justice meeting starts. Mr. Pope stated that they do not have the agenda finalized yet, but it will be an evening meeting.

Mrs. Shelly Wilson, South Carolina Department of Health and Environmental Control

Good morning, it is a pleasure to be here and I appreciate the remarks from Jack and Rob. Just wanted to give you an overall feel for where we are. All the permits for air, water, wastewater, storm water; all those permits are issued

through our agency, the South Carolina Department of Health and Environmental Control. Those are ongoing as a way to protect the environment and human health. In addition to those permits that are ongoing, our agency, DHEC, is involved in the cleanup of the soil and the groundwater that you have already heard mentioned this morning. I mention that foundation because I normally don't cover it in these updates, but those are ongoing activities that we are very involved in. The main thing you hear from me is about high level waste because that is a large area of potential risk that we are focusing on at DHEC because it represents the single largest environmental threat in South Carolina. Because it is such a risk area that we feel needs to be mitigated, we have put in place a series of milestones for treatment of that waste and for closure of the tanks. Those milestones stretch from now until the year 2028, staggered throughout the interim. We are glad that Tank 16 is closed; Tank 12 is on the horizon to be closed next. We did a public notice for the closure module for Tank 12 earlier this year. There will be another public notice for the addendum. The addendum is the next part of the closure module for Tank 12 and that has all of the information about the characterization of the residual material at the bottom of that tank. When you look at the addendum, that's what you will be wanting to focus on, the residual characterization. It was ready a little later than the closure module so we wanted to make sure you had a chance to review that information as well before there is a final decision on the closure of Tank 12. That public notice is coming up as Jack mentioned in October, so look for that public notice in the very near future.

The site has met thousands of milestones without missing one in terms of soil and groundwater cleanup. A large number of years the Site has consecutively met every milestone for soil and groundwater cleanup. The tank closure milestones so far to date, they have met. The difference that we are looking at is that after the closure of Tank 12, looking forward for the high level waste, the Site is not likely to meet any of them. That is what we mean by treatment has been slowing down since FY14 and also the impact of the Salt Waste Processing Facility delay. Although in the previous years everyone worked hard and we had tank closures, in the past couple of years things have been slowing down in terms of treatment. That, combined with the SWPF delay, jeopardize every single liquid waste milestone in the future apart from Tank 12. That is why we are making such a big deal of the treatment issue, the whole high level waste issue, and the funding issue. Because if anything is going to save those milestones, it has to happen now. I want to bring your attention back to one coming up next month. The first one in jeopardy is October 31, 2015, the startup of the Salt Waste Processing Facility. I think it is clear at this point that DOE is not likely to meet that milestone. Would love to partner with DOE to get a fix to the system that would get a lot of the treatment back online to be able to catch up and make up for the hole that we are in essentially right now. We would like to save those milestones out into the future so we are very open to negotiations with DOE in that respect; to get commitments for maximized treatment that will reduce that risk so that tanks can be closed. Hoping to negotiate something between now and then.

CAB Member Corbett asked if the CAB could have printed copies of the talking points from DOE, EPA and DHEC. Jack Craig committed to doing that.

CAB Member Hoel asked DOE to update on the security incident heard about on the news. Mr. Craig explained that they had an event in H-Area involving a delivery truck. The delivery truck, as it goes into certain areas on site, gets extra inspection. H-Area is one of those areas. It was at the entrance to H-Area that K-9 patrol detected the presence of explosives. They followed the normal process and got another dog to come in and verify that, which the dog did. The Site went on alert status where you clear a certain area from the event. There is a mutual aid agreement with the State of South Carolina which allowed the State to bring in a bomb unit. They did more evaluation on the truck and found out that it did not contain any explosives. They did a lot of evaluation after that with the delivery truck and its employer. Mr. Craig does not have the details of what was found, but there are lots of theories. Jim Giusti, DOE-SR, explained that when they went through the route of the truck, before it came to the Savannah River Site, there is a gun manufacturer in Jackson where the truck stopped, refilled the Coke machine, took the cash out, and the residue on the dollar bills that was in the vault on the truck was enough to alert the dogs. That truck will no longer make that stop on the way to the Savannah River Site. The Site followed procedures and went to the alert level.

CAB Chair Simon asked SCDHEC about milestones being missed and whether supplemental environmental projects are used. Ms. Wilson confirmed that they have been used in the past, but in this case they haven't actually received an extension request for SWPF and they have not actively gotten into negotiations yet because of that. There is really no supplemental environmental project to consider. If October 31, 2015 gets here and there is no complete negotiation, they would look at the actions they would take either by enforcement or penalty for missing the milestone.

CAB Chair Simon followed up with a question about whether SEP was considered during the negotiations on Tank 16 and Tank 12. Ms. Wilson stated it was not something put on the table, but they essentially got some things out of that negotiation that would be equivalent. The request for proposal that the Site is doing for additional waste treatment, that is to her equivalent to a supplemental environmental project that they would want, which is additional treatment. Although we didn't call it a SEP by name, it is essentially additional action that the Site is undertaking to mitigate the effects of the extension.

CAB Member Corbett asked SCDHEC to explain Supplemental Environmental Project. Ms. Wilson stated that when there is an issue of non-compliance and they go through an enforcement process, many times they will assess a penalty and, in some cases, rather than the money there is a mitigative environmental action that a facility will propose in lieu of part or all of the penalty; an action that they will undertake to mitigate the environmental effect.

CAB Member Corbett followed up by asking about the meeting coming up addressing the addendum. Ms. Corbett asked if at that meeting we would be able to find out and ask questions about what is left in the tank. Ms. Wilson confirmed they would be able to ask specific questions.

CAB Member Corbett stated that she is distressed they are not making these milestones and is happy to hear SCDHEC say that this is a major environmental concern for the State of South Carolina.

CAB Member Allensworth questioned DOE about min safe during a government shutdown and what that means to the workforce. Mr. Craig referenced the shutdown in 2013 and stated that the first thing all the contractors do if there is not a budget on October 1<sup>st</sup> is determine the amount of funding available to carryover from one year to the next and how long that funding would allow full employment. If they get to a point where the carryover does run out, then there is a furlough like in 2013. Min safe is those activities that are required to maintain nuclear safety. All discretionary cleanup work would halt.

CAB Member Kaminski asked about the stand down and how individuals were allowed to deviate from procedures so easily. Mr. Craig stated that they had the same concern and that anything involving nuclear material movement and operations is of serious concern to us. Ms. Carol Johnson was asked to come forward to talk to the question. CAB Member Kaminski commended SRNS for having the stand down and coming forward as quickly as they did. Ms. Johnson introduced herself as the President and CEO of Savannah River Nuclear Solutions, the managing and operating contractor for Savannah River Site, responsible for nuclear materials, tritium operations, and basic management and infrastructure of the Site. The event that occurred three weeks ago happened in the H-B Line, one of the plutonium facilities. The primary mission of that facility is to process oxide material for eventual processing in the MOX plant. The evolution that was taking place was to take some samples from plutonium cans in a glovebox, extract those samples, and place them in critically safe containers within a storage vault in the facility, and ultimately transfer those to laboratory for analysis. The crew performing this work, three operators and a first line manager, had extensive experience in the facility. They were operating under a "use every time" procedure which means the procedure has to be in place in hand during the operation. The procedure had to have been validated and table topped and reviewed in a pre-job briefing prior to the evolution taking place. That is standard operating procedure. We are unsure of several things at this point; but what we do know is that the procedure was reviewed and approved by management in the engineering department. The procedure was table topped prior to use and there was a pre-job briefing held. We have since revealed some deficiencies in the procedure, but that is still under investigation. The critical part of this that is disappointing is that the procedure requires that samples be placed in specified containers that are designed and appropriate for transporting nuclear materials. There are different types of containers used in this facility for different purposes. A decision was made midway through the evolution and as the samples were being removed from the glovebox, a different container not specified in the procedure would be used for the transport and storage of the samples. This, in my mind, is the most critical aspect of this evolution that was not complied with. We are currently doing a detailed investigation, along with a root cause analysis. It is very important that we understand what happened, what the thought processes were and what the drivers were that led to the deviation by the staff. The pause was aimed at getting everyone's attention, including the people who do not work in nuclear facilities. We have a very comprehensive plan in the works right now to step through this and get the operations back to a normal condition. Subsequent actions will have to be taken to ensure we do not have performance drift in a negative direction. Unable to say when they will be back in normal operations; it will be a very deliberate thought out process.

CAB Member Hoel asked DOE about the saltstone facility being down and remain in that condition until sometime in November. At the last Waste Management Committee meeting an update was given and indication that the mercury problems in that waste program had been resolved and that saltstone was about to start back up and now we hear that it has not started back up and won't until November. Mr. Craig asked Jim Folk, Liquid Waste Manager, to address the question, but stated he believes this is a scheduled outage for maintenance. The saltstone facility was up and operational after the mercury issues. Jim Folk, DOE, stated that they ran two very strong months and they are essentially out of feed at this point. The mercury issue will be briefed at the next Waste Management Committee meeting.

CAB Member Hoel asked about the information POD upcoming as well as the Environmental Justice meeting in November. Recently a recommendation was passed that included having CAB representation at public outreach activities. Has the CAB been requested to have representation at these activities? Jim Giusti, DOE, responded to the



question by saying the Environmental Justice meeting and the information POD are open for the CAB and the CAB members may speak with Eleanor about attendance. Jim will take an action to get back with CAB Member Hoel to make sure everyone is on the same page with these meetings.

CAB Member Corbett asked SRNS about the material that was placed in the non-specified container and what happened to it. Ms. Johnson stated that the material was placed in another container so it was left in that container. What they don't want to do is something quick without thinking through what they are doing. They stabilized it, kept it in place, and wrote a response plan. CAB Member Corbett asked how much we were talking about. Ms. Johnson said that for the three samples that were pulled, about 400 grams, a very small amount of material.

CAB Member Kaminski questioned the discussion of failed valves at the waste tank area at a recent committee meeting. The contractor was going through a root cause analysis and wanted to know if there was an update. Stuart McVean, President of Savannah River Remediation, answered the question. We have gone through an extensive review and follow-up after tearing apart some of the valves to rebuild them. We have found that we are having valve seal failures as a result of a combination of heavy use and radiation exposure. We have changed our protocol so that we are shortening the time frame between the evolutions to rebuild the valves so that we take into account both the amount of usage and the amount of radiation that has been exposed to the valve. On a forward basis, we have a maintenance program that will repair those valves over time. There are a couple hundred valves of this type so the time frame to get back into a fully compliant situation with the valve seals will be a couple year evolution for us but we are going down that path.

CAB Chair Simon asked the staff about the meetings and PODs and the process of informing the rest of the CAB members. He is concerned that there is a process that is being left out. Jim Giusti, DOE-SR, answered the question saying that he would get back with Harold on what is getting emailed and passed along. Because of a number of recommendations that the CAB has sent, the Administrative & Outreach Committee is the point of contact we have for any public outreach that we work through. We have committed to you to be a part of the public outreach and that is still the goal. de'Lisa Carrico, Acting Federal Coordinator, added that they just confirmed the November 19<sup>th</sup> date for the Environmental Justice meeting and that information was just passed along to Eleanor Hopson, A&O Chair. CAB Vice Chair Spinelli added that it is helpful to get the dates ahead of time so that more CAB members can attend.

#### Public Comments

Tom Clements, Savannah River Site Watch, commented that they have heard through the updates about a litany of problems at the Site. He would also add the abysmal situation with the mixed oxide fuel program. The mismanagement of that program has been stunning. We have heard about the salt waste processing facility problems. Shelly [Wilson, SCDHEC] has pointed out missing milestones. There have been problems with removing and processing high level waste. EPA is concerned about the number of high level waste canisters that are being processed. There are other problems at the Site, the most prominent of which has been with H-Canyon. Two major incidents this year resulted in this pause of other operations. I've never seen this before. I think the Site is at an existential moment. The CAB needs to face up to this and ask harder questions. We're only skimming the surface of what is going on at the Site. Some of these issues are related to budget, some contractor performance as we have seen with Savannah River Nuclear Solutions. I would urge the CAB to be particularly attentive to how DOE is managing the contractors. The situation with H-Canyon is a contractor issue. I want to know where DOE has been. Where is DOE's active role in day-to-day management or is everything just passed over to a contractor? I would like to make one concrete recommendation. At the end of this Fiscal Year, there is going to be a review of the performance assessment of the contractors. Their performance of meeting the contract goals is assessed and they get a bonus or not. I will call it a bonus, it's a bonus. Most of the time it is not reduced very much even if performance met the contract obligations; I've always been surprised that they get a bonus if they meet their obligations. Savannah River Nuclear Solutions responded when there were incidents so we're going to reward them for that. When, in fact, it might be the other case. I would request that the CAB ask to get copies of these performance assessments and not just the summary pages. It is hard to get these from DOE; I have to file Freedom of Information Act requests. Minimal stuff is posted by NNSA about the MOX plant performance, and on that issue there has been absolutely no accountability for a project that has run far over budget, far beyond its schedule. It's being protected politically. I'm afraid what is happening with MOX is instructive of how DOE is dealing with the contractors in other areas. I would request that you ask for those performance assessments for EM, all of them, not just the summaries, and that there be a presentation on why DOE gave certain assessments to some of the contractors and why a certain bonus was awarded. Particularly to Savannah River Nuclear Solutions. These assessments might not be finished until well into the next calendar year. I would request that it be put on the agenda to get those and have a briefing. We are at a critical moment and if things don't get back on track I'm afraid it could continue. I think you could have an important role in getting DOE to hold the contractors more accountable.

## Waste Management (WM) Committee Overview – Earl Sheppard, Chair

Earl Sheppard, Chair, Waste Management Committee, gave the update. He thanked everyone for being here and welcomed Jack Craig to the CAB meeting. He thanked DOE and staff for the prompt response to the security issue at the first of the month. Mr. Sheppard introduced his committee members: Dr. Virginia Jones, Vice Chair; Susan Corbett; Murlene Ennis; David Hoel; John McMichael; and Louis Walters. Mr. Sheppard read the committee purpose and goal. There are no pending or open recommendations at this time. The next Waste Management Committee meeting will be Tuesday, October 6, 2015 from 4:30 to 6:20 at the New Ellenton Community Center. Mr. Sheppard then introduced the presentation for the day by Pam Marks, DOE-SR, on the Salt Waste Processing Facility Project Status.

### Presentation: Salt Waste Processing Facility Project Status – Pam Marks, DOE-SR

Pam Marks, DOE-SR, gave a presentation on the Salt Waste Processing Facility Project Status. Ms. Marks said that it had been about a year and a half since she spoke to this committee. She also brought up that some of the members had the opportunity to tour the facility last summer and she hopes they will be pleased to see the changes and progress made since then. Ms. Marks said that the project changes every day as they move forward to get the facility constructed and into the testing and commissioning phase, and get the facility operational. Ms. Marks stated that the Salt Waste Processing Facility is a significant aspect of the liquid waste program. Their responsibilities will include processing the salt waste currently stored in tanks on site. They will separate the radioactive components from the salt waste, they will return those to DWPF for vitrification and final disposition and the non-radioactive effluents will go to the saltstone facility for disposal. They are using the exact same process as is being used in the ARPMCU, which is a pilot scale of our facility. We are very pleased to have that experience and investment, it gives a lot of strong technical confidence that when it is their time and they can seamlessly get into operations and full capacity very quickly. The facility is designed to have a capacity of about 6 to 8 million gallons per year. Parsons is the contractor; they designed the facility, they are constructing the facility, they will commission the facility, and they have responsibility for the first year of operations. After that, it is the expectation that SWPF will become part of the liquid waste program. The materials they are talking about are currently stored in the F and H Area Tank Farms. The materials are brought into the facility by a three step process. The first step is alpha strike and will remove the strontium and actinide materials from the waste stream, which gets returned to DWPF. The second step is the cesium removal and that effluent also goes back to DWPF. They have a decontamination factor target for the facility and if that is not achieved during the first two processes, they have an alpha finishing process that strikes the material again and take out any remaining radioactive components and return them to DWPF. The decontaminated salt solution goes to saltstone for grouting. Ms. Marks pointed out the location of the facility to be centrally located with feed lines running from F and H Tank Farms. Adjacent to the SWPF is the DWPF. This is so that there is minimal movement of the materials. They have made great progress since she spoke to the CAB last. They are at 90% completion of construction as of the end of the month. They are at the last 10%, which can be the hardest in the project, but they are working hard to push it across the finish line. Forecasting a May of 2016 completion date, they hope to declare the facility complete and move into the testing and commissioning phase. The goal for commissioning the facility is December of 2018. The commitment to headquarters and congress is actually 2021, but they are working hard and pushing hard and working with the contractor to accelerate the commissioning phase as much as possible. Ms. Marks showed progress photos, one, of the waste transfer line, which connects salt waste to DWPF. The lines are run right up to DWPF, but there is one more phase to make the final connection as they get closer to operations. Great progress has been made on finishing the laboratory. They are a stand alone laboratory and will be able to handle all of the effluent and testing to be done to characterize the waste coming in and going out. There is about 8,000 feet of facility. There is a hot cell element in the laboratory to handle the really hot materials. There is a total of 11 glove boxes and a fully contained transfer system so all of the materials are automatically transferred to preclude human intervention and the potential for exposing workers. They hope to be able to help out other parts of the site when operational such as DWPF. They also have the Parsons Technology Center, located off Silver Bluff Road in Aiken. Ms. Marks stated that they have really been blessed with a great investment in technology on the project. The ARPMCU facility is one and the investment in this facility is another one. Historically, all of the full scale testing of the major equipment components was done in this facility, so they are building the confidence that the equipment will work properly when the time comes. Just recently they completed a 3,000 ft. expansion of that facility to bring in all analytical equipment and use it to do methods development on the actual equipment that will go into the facility. They will develop those methods and procedures and then that equipment will be moved into the facility closer to hot operations. All of the equipment is in procurement right now and the expectation is that all of that equipment will be onsite and installed at the time they declare completion next year. Ms. Marks continued to say that construction is in front of them, it is a really important milestone, but the end game is an operating facility. They are very focused on the future; very focused on getting themselves ready for testing and commissioning. Parsons is doing a great job of hiring the operating workforce that is going to be needed to run the facility; getting them on board and getting them trained. System turnover is the end of construction. There are 71 systems being turned over individually. Next May will be the

overall declaration that construction is complete and then they move into the testing phase. The first thing that is done is the calibration, grooming and alignment (CG&A) of equipment. Then there is a series of sixty operational tests; forty of which are complete and have been approved and ready for test. Next, there are five integrated systems tests where combinations of the individual systems are tested in an integrated fashion. Then there is the whole system test with water, followed by a test with cold simulants. This was a big lesson learned from other DOE projects; you really want to test the facility as much as you can with the real stuff. Obviously, you cannot bring radioactive materials in, but they have developed a formula of a simulant that very closely replicates the salt waste that will come into the facility. Then they go into the readiness verification phase. Both the contractor and the Department do an operational readiness review where they make sure systems are ready, people are trained and qualified. There is a lot of focus on the contractor being ready, but there is also a lot of focus on the Department being ready, too. There has to be trained, qualified people in the oversight role to be sure that when we bring this facility online we are ready to accept it. Once CD4 is complete, they get authorization from headquarters to begin hot operations. Then they go into a hot commissioning phase. This will take a couple of months and they slowly and incrementally introduce the materials into the facility and start ramping up to get to full capacity. The contractor is planning three management self-assessments prior to going into the operational readiness review. They have a phased approach; the first phase covers safety management programs and ensures that we are ready to test. This is scheduled for February of 2016. The second phase is done right before the cold commissioning, where all the systems, processes, procedures and oversight are confirmed in place so that the chemical can be safely introduced into the facility. The last phase is to make sure the nuclear safety program is in place and viable. When they get into the hot commissioning phase, there will be some performance testing to monitor stack effluents and radiological exposure to be sure they are in compliance with those requirements. They will be using this facility for other things in the future such as looking at next generation solvents. Ms. Marks stated they have also done a lot with their contractor, Savannah River Remediation (SRR), to interface with them as the liquid waste operator. They have worked very hard on putting integrated schedules together, identifying key milestones, permitting, etc. Both have very detailed schedules that they align on a monthly basis. Recently implemented plan of the month meetings where DOE, Parsons, SRR sit down and discuss the status. Slide shows key projects that have to be done to become operational. Items in blue are those that have to be done to start-up; items in orange are being planned to ensure enhanced throughput after going into operations. SRR has some upgrades that need to be done to their blend and feed and they are doing some upgrades in their waste handling. The last tie in to the waste transfer line is called the "Big Dig". There are some other modifications being made to ensure DWPF can handle all of the materials safely. Near term focus is on construction complete and the 71 system turnovers. Looking out farther to the testing phase, they will be approving the system test procedures, doing the management self-assessment, and bringing on the operations staff and doing the training. They are making sure they do rigorous oversight in all of these elements. For the future, they have a very high degree of technical confidence that this facility is going to operate when it gets up and running. There have been big investments in testing and technology.

CAB Member Hoel asked if the saltstone disposal permit has a requirement for startup next month, and SWPF does not expect startup until 2018, why hasn't DOE requested an extension to that requirement. DOE-SR Manager, Jack Craig, answered by saying that they are looking at a couple things to get to a resolution on this issue. One is that there are things they can do to SWPF after it is operational to increase its throughput. The other is that there may be some things they can do in the near term to increase salt treatment while SWPF is in the startup phase.

CAB Member Hoel asked how saltstone would keep up with SWPF once it is operational. Jim Folk, DOE-SR, answered the question by saying they are doing a couple of things. On one of Ms. Marks' charts is something called ELOD, doing physical upgrades to the saltstone facility itself that will improve its capacity. Another item being looked at is going to a 24/7 operation. Currently they run one shift 4-5 days per week, and they have been able to process about a half million gallons in the past two months. Mr. Folk believes that demonstrates their ability to increase the throughput. Mr. Folk pointed out several items they are doing to get prepared, including getting spare parts in place for the mixer so that if there is an issue, they can get in and get it fixed and be back up and running in a short amount of time. Mr. Folk also stated that they have Tank 50, a million gallon tank, between SWPF and saltstone that would be available for surge capacity. Mr. Hoel pointed out that was a good answer, but he predicts failure.

CAB Member Gil Allensworth asked when DOE anticipated hiring the workforce and what would be the total number of workers. Ms. Marks stated that they were hiring now and that when they are fully staffed, there will be approximately 300. She further stated that they are hiring in stages, they are not trying to bring everyone on board at the same time.

CAB Member Allensworth asked Jim Folk, DOE-SR, if they were to go to 24/7 operations, how many would he need to hire. Mr. Folk answered about 20 to 25.

Before closing, Waste Management Chair Sheppard noted that the CAB was well represented in Santa Fe. CAB Member Allensworth followed that by praising the staff's concerted effort to update and maintain the social media outlets.

#### Administrative & Outreach (A&O) Committee Overview – Eleanor Hopson, Chair

Eleanor Hopson, Chair, Waste Management Committee, gave the update. Ms. Hopson introduced her committee members: Chris Timmers, Vice Chair; Murlene Ennis; Ed Sturcken; and Louis Walters. She welcomed everyone to New Ellenton, South Carolina and reminded everyone that new members are always welcome to apply. Ms. Hopson shared that there are some members leaving the Board; there will be two, possibly three, positions open. She reminded everyone that the Board Beat Newsletter is available and copies are on the back table. Ms. Hopson then brought up the business of possible renewal of two positions statements: "The Savannah River Site Citizens Advisory Boards Position on the President's 2015 Budget Proposal" and "Position Paper on Support of SRNL."

#### Voting for Position Statement Renewal: "The Savannah River Site Citizens Advisory Boards Position on the President's 2015 Budget Proposal"

Ms. Hopson asked Ms. Watson to open this discussion. Ms. Watson stated that the discussion on this position paper was held on day one of the CAB meeting and that the question on the table was whether or not to let it expire. Ms. Watson called on CAB Chair Simon to officiate the voting. CAB Chair Simon said that based on the discussions and recommendations from yesterday, he feels this position statement should expire because the information in the position statement is obsolete. He opened the floor for further discussion on the position statement. CAB Member Hoel supported the suggestion that the position paper has outlived its useful purpose and he was voting against the position paper. CAB Chair Simon moved that the CAB allow the position statement to expire. Having had a motion and a second, a vote was taken to allow the position statement to expire. Motion passed unanimously with 21 votes.

#### Voting for Position Statement Renewal: "Position Paper on Support of SRNL"

CAB Chair Simon announced the floor open for further discussion of the second position statement up for renewal. CAB Member Hoel again believes that this position paper has outlived its usefulness in that it was intended to be a position that would be reported to the Commission; the Commission has already done its work, and that is complete. Mr. Hoel made a motion to allow this position statement to expire as well. Having had a motion and a second, a vote was taken to allow the position statement to expire. Motion passed unanimously with 21 votes.

#### Public Comments

Ms. Watson announced another public comment period. An unnamed member of the public voiced her appreciation for the CAB Members and reminded them that what they do is important to a lot of people. She continued to say that people that live around the Savannah River Site and others like it, do have a lot of concerns about their health and safety. Referencing the operational pause and an earlier failed pump, she states that one can conclude that larger incidents are possible. She makes this comment because the Savannah River Emergency Response Team had poor grades three years in a row. She questions whether there has been any improvement to the Savannah River Emergency Response Team. Jim Giusti, DOE-SR, responded by saying that the response team on duty at that time reported to their stations and they did what they had been trained to do. They were familiar with their procedures and went through them methodically and communicated and did the things that they were trained to do; it was second nature to them. Their performance is being critiqued by themselves; there were no evaluators in the room, there was only the emergency response team doing what they were trained to do. He thought they performed well. This event gave an opportunity to see what would really be done in an actual event and he feels they did what they were trained to do very well. They have positive feedback from headquarters on the quick response. There is always room for improvement. Jack Craig, DOE-SR further commented by saying he agrees with Mr. Giusti, the response to this event was effective. Mr. Craig did acknowledge that some of the shortcomings identified in the past year or two had to do with how drills are conducted, whether they are comprehensive, are they multi-facility drills, etc. There is a site-wide drill to be held in November and will be a good opportunity to see if they have corrected deficiencies identified in previous drills.

## Facilities Disposition & Site Remediation (FD&SR) Committee Overview – Tom Barnes, Chair

Tom Barnes, Chair, Facilities Disposition & Site Remediation Committee, gave the update. Mr. Barnes invited all to attend the next committee meeting on October 13, 2015. Mr. Barnes then introduced the presenters for the day, Zachary Todd and Terry Provost.

Presentation: Military Use at SRS – Zach Todd, DOE-SR & Terry Provost, DOE-SR

Zachary Todd, Department of Energy, began the presentation “Military Use at SRS”. Mr. Todd explained that he is a cost estimator, but under his department of integration and planning is the role of military coordinator. Mr. Todd will be discussing the overarching military uses of the Savannah River Site, not just military training, but also some of the input that the military has for the Department of Energy at Savannah River Site. Terry Provost will then discuss the actual projects that were completed by the South Carolina National Guard. Mr. Todd explained that the purpose of the presentation is to fulfill a request by the Citizens Advisory Board. He shared the agenda for the presentation and then moved into explaining the acronyms. Mr. Todd then began with the history of what brought the military to SRS. The military in South Carolina is short of up to 30,000 acres for training facilities. Compounding this was base closures and advances in technology of weapons; weapons have gone from hand-held knives and swords to modern day where they can reach kilometers. When you think of weapons training, you may think of live fire. There has been no live fire at Savannah River Site nor are there any plans for it. Some factors that played into the Department of Energy’s support of military use of SRS were that: DOE has interest in national security; it is compatible with SRS’s missions and sustainable natural and cultural resources stewardship; the U.S. Military benefits from the unique training capabilities afforded by SRS and Savannah River National Laboratory (SRNL) expertise; and SRS can also provide some unique facilities for training. In 2007, the Department of Energy signed a memorandum of understanding with the Department of the Army. Then, in 2009, an interagency agreement was forged between SRS and Fort Gordon. Finally, SRS and the South Carolina National Guard are in the process of forming a memorandum of understanding. Under the agreement with Fort Gordon, “Operation Warfighter” was developed. This is a program that allows medically retiring soldiers the ability to come to SRS and intern. Recently, this was expanded to include all soldiers, not just those medically retiring. Some key points have to be observed in order for the military to use SRS, namely: no interference with site operations; no incremental cost to SRS; the military is responsible for the training activities and overall safety; training events are pre-coordinated, approved by DOE, and limited to specific areas at specific times; and training plans must account for and protect Site environmental and cultural resources. Mr. Todd showed photographs of buildings unique to Savannah River Site that are well-suited for training activities as an example of why the military is interested in using the Site for training. One of the big training events held at the Site was Carolina Thunder. The military also uses the site for nuclear and biological training exercises.

In addition to the military using the Site for combat training, the National Guard has also done some projects that have a mutual benefit to the Guard and the Site. Examples of these include the new fire pond dam, B area storm water basin, and clearing of sludge lanes damaged by the ice storm.

Terry Provost, Department of Energy, gave a more detailed talk on the South Carolina National Guard projects. Mr. Provost revealed that in honor of the work that was done by the 24<sup>th</sup> Engineering Company, what was known as New Fire Pond Dam, is now known as the call sign of the Company. He stated that the project ran from July 8<sup>th</sup> to July 22<sup>nd</sup>. There were 100 soldiers participating from the South Carolina National Guard. They looked at NEPA, the Site Use/Site Clearance, and SCDHEC for guidance in executing the three projects at SRS. NEPA being the federal law which makes sure what you are doing enhances the environment and does not destroy it; the Site Use/Site Clearance gives all SRS entities the opportunity to review the project and make sure their operations are not being impacted; and the SCDHEC reviewed and issued the permit for the work. The three projects completed were the central sanitary waste water sludge lane clearing, B Area detention basin, and the New Fire Pond Dam removal. These projects were done with a resulting cost savings of \$250,000 to SRS.

Safety was in this from beginning to the end. For example, in the convoy leading out there is a lineman truck to clear out the hot lines so that the Guard could enter and exit their work area safely. The Guard was also supported by the engineering group and others from the Site.

The sanitary waste water sludge clearing was permitted by SCDHEC; no silt fence was required because it was the interior of the site and no tributaries were near. There were 20 lanes, each three football fields in length cut and cleared from the ice storm damage. The debris and vegetation remained on-site. This clearing was done so that SRS can take the sanitary waste and put it back there. This happens every one to two years, depending upon the loading. Mr. Provost showed photos of what the area looked like after the ice storm in 2014 and what progress was made with this project.

The B Area detention pond project involved installing silt fence and sediment tubes; removing the vegetation and debris from the drainage ditch; slope and cut berm to grade; remove existing spillway and flow pipe; install rock check dam in place of berm; and track and hydro-seed the slopes and surroundings. The USDA provided the grant for the hydro-seed.

The Fire Pond Dam project was to install silt fence and hay bales and sediment tubes; remove dam soils of approximately 4000CY; remove the spillway and flow pipe; grade and slope the dam area; replace rip-rap; and track and hydro-seed. There was also a staging area for the soil removed and the forest service will be able to use the soil around the site at an additional cost savings.

Mr. Todd and Mr. Provost asked for any questions. CAB member David Hoel referenced the training exercise where there were quite a few aircraft coming on-site. He specifically asked if there were any noise complaints from off-site. Mr. Todd acknowledged that the F-16s are by far the loudest but stated that if they remained above 2,000 feet, there was nothing they could do about the noise level. There was a noise test done on the apaches, to Mr. Todd's knowledge, there were no noise complaints received.

CAB member Susan Corbett asked if there were any no-fly zones set up to reduce the risk of an accident with aircraft flying over the Site. Mr. Provost stated that there are no-fly zones established. Mr. Todd explained that there are pre-designated corridors established that the helicopters can fly.

CAB member James Streeter asked that, in consideration of the myriad of coordination done, has SRS considered all of the South Carolina National Guard units or are they specifically focused on a limited number of units; and have they considered the reserve units as well? Mr. Todd explained that they have looked at the scope of work to be done and the resources available from each of the Guard units. Mostly what they are looking for on the projects are the engineering type units, but for overall training, they have looked beyond the South Carolina National Guard to the reserve units and the Georgia National Guard, to name a few.

CAB member Bob Doerr asked that, with the agreements that are in place, does the military cover all costs, or are there still costs associated for the Savannah River Site? Mr. Todd explained that most everything is covered by the military; however, sometimes SRS does pay a small amount when there is a benefit associated with the project. Mr. Doerr followed up by asking if there was a need for catastrophic accident insurance. Mr. Todd explained that the National Guard is put into the federal status and a soldier cannot sue the government for injury or death, so there is no risk for the Site from that perspective.

#### Voting for Draft Recommendation: "Health Effect Reporting by the Savannah River Site"

Tom Barnes, Chair of Facilities Disposition & Site Remediation Committee, introduced the draft recommendation "Health Effect Reporting by the Savannah River Site." Extensive discussion was held on the day prior and changes made were reflected by highlights on the screen. Mr. Barnes recommended approval of the recommendation and called on CAB Chair Simon to hold a vote. CAB Chair Simon asked if there were any further comments to this recommendation. CAB member, Dawn Gillas, stated that she felt a lot more could be done rather than just focusing on the ATSDR report. A motion was made to accept the recommendation and seconded. The motion was passed by a vote of 18 to 3.

#### Nuclear Materials (NM) Committee Overview – Larry Powell, Chair

Larry Powell, Chair, Nuclear Materials Committee, welcomed everyone and listed his committee members. Mr. Powell stated that they have one open recommendation, number 330 which involves funding increases for processing materials. Mr. Powell stated that they would like to close that recommendation today. Mr. Powell invited Ginny Jones, Vice-Chair of the Nuclear Materials Committee to summarize the response received from DOE on that recommendation.

Ms. Jones stated that the recommendation was written due to the concerns of the foreign materials being brought into the Savannah River Site. There were three specific concerns: one was the cost of processing the materials; the second was the monies being sent to Savannah River Site for this processing; and the last was the wear and tear on the equipment used to process the material. The first recommendation was to work with the appropriate agencies to increase the rate for materials. The response from DOE pointed out that there was a new fee rate that was published in the Federal Register. On the second recommendation, DOE assures that they continue working on funding for the nuclear materials processing, but that they are limited by certain laws. The last recommendation response gives examples of two instances where they did give some of the money to the infrastructure, in particular funding of a new

roof for one of the buildings which houses the nuclear material. Ms. Jones stated that she was satisfied with the response from DOE and would recommend closing the recommendation. CAB member Dawn Gillas, who co-wrote the recommendation, reiterated that these types of infrastructure funding must continue. Pat McGuire, DOE, responded by saying that they are continuing to work on two infrastructure projects; one example being the electrical substations in both K and L area. Agreement has been reached to split the cost on these improvements with NNSA. Mr. McGuire further stated that they will continue to work with NNSA and other programs to ensure funding for the various infrastructure projects. Ms. Gillas asked about the activities with Canada, does it follow the same schedule? Ms. Gillas stated she knew there would be some benefit with this because we would get the blended down for Tennessee Valley Authority. Mr. McGuire confirmed that there were two contracts with Canada, one on the target residue material, as well as the spent fuel receiving from Canada. Ms. Gillas asked if that was additional money over and above the scheduled rates. Mr. McGuire stated that for the project modifications it was not.

Mr. Powell confirmed that, since they got what they believed was a good response from DOE, the Committee would consider the recommendation closed at this point.

Mr. Powell invited everyone to attend the next committee meeting on October 6<sup>th</sup> at 6:30 at the New Ellenton Community Center. Mr. Powell then introduced Allen Gunter to present on H Area Operations.

Presentation: H-Area Operations – Allen Gunter, DOE-SR

Allen Gunter, Senior Technical Advisor to the Assistant Manager for Nuclear Material Stabilization began his update on what the H Canyon operations are. This was requested as part of the 2015 work plan.

This year has been a very busy year for H Area, in many ways. They have continued processing aluminum clad spent nuclear fuel; they have done some readiness assessments for purification of uranium; they have limited oxide production; they are recovering from the agitator event; and now they are under the stand down.

In November of 2011, the National Nuclear Security Administration made the decision to use some of the H Area for early feed for MOX. Whether the material goes to MOX or not, it will be put in a form for disposition. Some of the material currently cannot be dispositioned due to various reasons. Processing through H Canyon and HB Line does put it into a form for disposition. They have prepared H-Canyon/HB-Line and support facilities for startup to produce plutonium oxide; they have reconfigured process operations and staffing to allow for ramp up in oxide production rate; they have developed and implemented all required safety basis documentation and required modifications, including implementation of DOE STD 3009 compliance.

Material is received from K Area; it is unloaded in HB Line. It is repackaged into dissolvable cans and is transferred into H Canyon where it is dissolved. It then goes to a product tank and back up to HB Line where they use anion exchange columns to capture the plutonium, and elute the plutonium from the columns. The plutonium then goes through a precipitation step using oxalic acid, converts it to an oxide in the furnace, then is put back in casks to be shipped back to K Area and await disposition either into MOX or an alternative disposition.

They have completed multiple safety basis changes, procedure changes, training, etc. H-Canyon continues dissolution of non-pit plutonium. Savannah River approved the Documented Safety Analysis/Technical Safety Requirements (DSA/TSR) to support oxide production and the facility has implemented the DSA/TSR requirements including personnel training. Savannah River Nuclear Solutions is hiring staff to support multiple shift operations in HB-Line. Savannah River completed its HB-Line Readiness Assessment and concurred the facility ready to start oxide production. Introduced plutonium solution to the facility on August 8, 2014 and produced the first can of oxide on August 27, 2014.

In H Canyon, DOE approved a Supplement Analysis (SA) and Amended Record of Decision (AROD) to allow the processing of a limited amount of enriched uranium aluminum clad spent nuclear fuel up to 1000 Material Test Reactor (MTR) Bundles and 200 High Flux Isotope Reactor (HFIR) Cores. SRS initiated processing al-clad spent nuclear fuel on September 16, 2014. Spent nuclear fuel will be dissolved, uranium recovered, purified, down blended, and shipped for use at Tennessee Valley Authority (TVA). Processing the spent nuclear fuel identified in the AROD will generate approximately 40 metric tons low enriched uranium (LEU) and will only generate approximately 35 high

level waste glass canisters. To date, they have processed 60 bundles of aluminum clad spent nuclear fuel this fiscal year (through end of June 2015).

Mr. Gunter pointed out that CAB member Dawn Gillas was asking about the Canadian project. Mr. Gunter explained that they are planning on bringing material to the Savannah River Site from Canadian Nuclear Laboratories Limited (CNLL) (formerly Atomic Energy of Canada Limited) which is the resulting solutions from the processing of targets that contain US origin highly enriched uranium and fission products. This is being conducted as part of the Material Management and Minimization Program to eliminate weapons-usable nuclear material. Quantity of material is approximately 6,000 gallons of solution plus flush material. Savannah River Site will receive the uranium solution, process through H-Canyon, purifying the solution, and discard the fission products to the liquid waste system. The purified solution will be down blended and shipped to Tennessee Valley Authority for fabrication into reactor fuel. The processing of the Canadian Target Residue Materials (Liquid) will generate less than a vitrified glass canister of waste. The Canadians are funding this program by providing \$60M, above and beyond US funding for spent nuclear material.

Solution will be shipped in a spent fuel cask. The license application has been approved by the Nuclear Regulatory Commission for the 4 small canister configuration and the uranium liquid content in the Legal Weight Transport cask. It is planned that the International Atomic Energy Agency (IAEA) will apply seals to the container in Canada and the Site will return the seals to CNLL or the IAEA.

Mr. Gunter explained that earlier this year there was a failure with the agitator system in H Area. Fissile limits defined in the criticality analyses were never violated. The facility experienced a loss of power in the facility which resulted in the variable speed drives on the agitators tripping off-line without operations personnel recognition. After sampling, but without agitation, three transfers were made between HB-Line and H-Canyon. Upon discovery, operations were suspended and vessels were evaluated to ensure within established safety limits, a thorough extent of conditions was performed to ensure all credited actions could be performed, and modifications were made to assist operators in the verification of tank agitation. SRNS then completed a readiness assessment, SR shadowed the RA and validated closure of corrective actions, and operations were resumed on July 20, 2015.

In summary, H Canyon remains a unique national asset to the Department; the Department does recognize that and they are looking into the infrastructure of H Area. They are continuing the dissolution of aluminum clad spent nuclear fuel and they continue to perform readiness assessments to resume full facility operations. They will continue with preparations to receive uranium liquid from Canada and have recovered from the agitator event and resume plutonium operations.

Mr. Gunter then opened the floor to questions from the CAB members. CAB member Susan Corbett asked about the plutonium flow sheet page. She asked in what form is the plutonium received. Mr. Gunter explained that whatever form, be it oxide or metal, it will still need to be processed to a usable oxide form. Ms. Corbett followed up with a question about where the material originated. Mr. Gunter said that it originated from Rocky Flats, Hanford, Los Alamos, Livermore; from around the complex.

CAB member James Streeter asked what type of modifications were done to assist the operators in determining whether the agitators were functioning properly? Mr. Gunter stated that basically the amp meters were installed on the agitators to show a difference in electrical current.

CAB member Larry Powell stated that he is fascinated that H Canyon is as old as it is and as technologically as advanced as it is; however, given its age, is there any chance the canyon would need to be replaced with a new building in the near future, and, if it is replaced, would it be replaced at SRS or rebuilt at another location? Mr. Gunter took part one first, saying that if it would need to be replaced depends on where the Department sees new missions going. As far as where it would be built, he would have no idea.

CAB member Dawn Gillas asked if there has been an evaluation on how long the canyon can run. Mr. Gunter said that they are starting to look at that, but it comes down to how much money we are willing to expend.

CAB member Mary Weber asked about the material coming to H area from K area and then returning to K area and what happens to it and in what form is it returned? Mr. Gunter explained that it comes in as a solid in various forms;



they process it and remove the impurities; convert it back to an oxide (powder); and place it back in K area for secure storage until disposal either in MOX or WIPP, or another option.

#### Strategic & Legacy Management (S&LM) Committee Overview – Bob Doerr, Chair

Bob Doerr, Chair, Strategic & Legacy Management Committee, welcomed everyone and listed his committee members. Mr. Doerr invited all to the next Committee meeting on October 13<sup>th</sup> from 4:30 p.m. to 6:20 p.m. at the New Ellenton Community Center. Mr. Doerr stated that they have recommendations 323 (Safety Procedures and Emergency Preparedness at the Savannah River Site and other DOE Sites) and 331 (Improve Public Participation) open. A response has been received on 331 and the Committee will review the response and make a recommendation back to the Full Board on meeting options for 2016 and beyond. Mr. Doerr introduced Rich Olsen to give the presentation on SRS Land Use Plan.

#### Presentation: SRS Land Use Plan – Rich Olsen, DOE-SR

Rich Olsen, DOE-SR, Office of Integration and Planning, began his presentation. Mr. Olsen will be giving an update of the land use plan which was updated in November of 2014. The Department requires integrated land use planning for all of its sites across the country to ensure two major things: to support the current and future DOE missions; and to ensure appropriate reuse of any of that land. Savannah River Site is unique from the other sites in that it is a multi-program site, meaning that EM has missions of cleanup, but NNSA also has missions for tritium and non-proliferation. From a land use management responsibility, rather than having two organizations manage the land as two entities, DOE has assigned the lead program for SRS to EM as the landlord of the Site. SRS has a significant size of land mass, roughly the same size as the beltway around Atlanta or Washington, DC. DOE Order 430.1B governs the use of the land of Savannah River Site. This Order says that all sites must comply with NEPA as well as long-term plans, the assets of the site, the infrastructure, and long-term stewardship. Stakeholder and public participation in the planning are encouraged. Another consideration for land use is the economic development under the Community Reuse Organization. Environmental law, cultural assessment and historic land use also play a role in the land use planning.

The first thing done on SRS in interpretation of the Order is take into consideration the assumptions that the Site will be managed upon. The number one assumption is that SRS will maintain its current physical boundary under the ownership of the Federal Government in perpetuity. There is one exception, where lease or transfer to private or public entities in accordance with applicable laws and regulations aligns with DOE objectives and enhances economic development in the surrounding region. Further assumptions are that land use will be nonresidential; the National Nuclear Security Administration (NNSA) Defense Programs will continue as an enduring mission; the Savannah River National Laboratory (SRNL), a national asset, solving critical issues for national security, clean energy and environmental management, will continue as an enduring mission; site infrastructure will be right-sized to support assigned site missions; upon completion of environmental cleanup and nuclear materials disposition missions, long term environmental monitoring responsibilities will be released to another DOE Program Secretarial Office; canisters of vitrified high-level nuclear waste will be shipped off-site to a national repository; natural resources (forests, watersheds, and endangered species) are valued site assets and will continue to be actively managed; unique ecological habitats and archaeological sites will be protected and enhanced; and SRS will continue to set aside specific research sites for the purpose of preserving non-industrial reference areas for environmental and ecological baseline data.

Currently the Site is being used for two main purposes: EM missions and NNSA missions. Other site activities, some of which support these missions include: Savannah River Ecology Laboratory (SREL), which provides independent assessment of the impacts of SRS operations on the environment; United States Forest Service (USFS) that conducts natural resource management for SRS; Ameresco that provides steam generation and supplemental electricity via a biomass cogeneration facility; Centerra, who provides paramilitary security services for the site; the military conducts low intensity, non-live-fire training activities; and Three Rivers Landfill, a lease of 1,380 acres of land from SRS for operation of a regional landfill (SRS also uses the landfill for certain of its own solid waste disposal needs). Although there are a lot of heavy uses of the Site, the majority of the land is used as a buffer area. Of the roughly 198,000 acres on Savannah River Site, 14,076 acres (7%) are designated as industrial areas, 14,005 acres are also set aside as research areas, and 158,281 acres (80%) is used for either buffer or for the Forest Service and military use. 11,982 acres (6%) is used for non-federal use, including SREL, UGA Conference Center, Three Rivers Landfill, Crackerneck Wildlife Management Area, and cell phone towers.

In order to change the land use, a request must be made to the Site Manager. A lengthy assessment and analysis is then done to assure alignment with DOE missions and objectives, compliance with requirements, economic impact, and land use control. Concurrence must be obtained by the EPA and SCDHEC. Then DOE makes its decision to approve or deny the request. One time, back in the 1970s, the boundary was actually changed when 2,500 acres was transferred to Barnwell County for an industrial park.

In summary DOE-SR will continue to manage land use responsibilities at SRS in accordance to DOE Order 430.1B, and stakeholders, including the Citizens Advisory Board, will continue to have a voice in future land use discussions.

Mr. Olsen then opened up the floor to any questions. Mr. Rob Pope, EPA, made the comment that the policy DOE has for Savannah River very much influences the cleanup decisions made by EPA, SCDHEC and DOE; the idea that the property will always remain in federal hands and federal control, is why they make decisions to do things like close reactors in place, consolidate coal ash in place, cap in place, because there will always be someone keeping an eye on it. This is a very different scenario from other hazardous waste sites, where they cannot control who will ultimately have the land.

Voting for Draft Recommendation: "Timely CAB Notification of SRS Unusual Events and Issues"

Robert Doerr, Chair of the Strategic & Legacy Management Committee, introduced the draft recommendation "Timely CAB Notification of SRS Unusual Events and Issues." Discussion was held on the day prior and changes made were reflected by highlights on the screen. Mr. Doerr called for any other comments on the recommendation. CAB member, David Hoel, requested one correction on recommendation number 4; at the very end, it should say relating to EM missions as an award fee criterion. Dan Kaminski, CAB member, requested clarification on this correction. CAB member Hoel explained that the gist of recommendation number 4 was to increase the priority by DOE on its SRS contractors to make sure they inform DOE in a timely manner of unusual events and issues. As a way of incentivizing them to do so, Mr. Hoel recommends making that a criterion of their award fee. CAB Chair Simon called for a motion to approve the recommendation. A motion was made to accept the recommendation and seconded. The motion was passed by a vote of 18 to 3.

#### Public Comments

Tom Clements, SRS Watch, stated that we all know that the MOX project has a lot of problems, given the HB Line and H Canyon, and other issues, conversion to oxide and potential packaging to WIPP; it is a little unclear where that is moving. So the discussion about what is going to happen to this urgent project continues. Mr. Clements submits for the record the International Panel of Fissile Materials with Princeton's Global Security Project report produced earlier this year entitled, "Alternatives to MOX: Direct Disposal Options for Stockpiles of Separated Plutonium." The scientists who work on the panel put a lot of work into this. Mr. Clements wants the CAB to be aware that there are discussions going on surrounding this and options apart from MOX.

Che Long, GA WAND, stated their excitement of the recommendation Tom put out passing and wanted to add something to it. They understand that the study is important, but that it is not going to be a comprehensive study until it addresses the lack of a system-wide contamination study. Until they are really able to quantify the combination of industry pollutants, from both Plant Vogtle and Savannah River Site, the study will not be effective in showing the health impacts of the people who live near the site. We hope that in the future, the CAB will consider doing a comprehensive study that looks at doing the combined impacts of both sites.

#### Closing

Harold Simon, CAB Chair, closed the meeting by thanking the CAB members for their support, especially the new members. He further thanked the CAB Support Team, and American Audio Visual. Finally, he thanked the public for their feedback and encouraged them to take advantage of the public comment periods, and continue to inform their family, friends, and neighbors about the CAB.

~Meeting adjourned

All presentations are available for review on the SRS CAB's website: [cab.srs.gov](http://cab.srs.gov)