

Meeting Minutes  
Savannah River Site (SRS) Citizens Advisory Board (CAB) – Combined Committee Meeting  
New Ellenton, South Carolina (SC)  
July 27, 2015

Attendance – Monday, July 27, 2015

CAB

Gil Allensworth  
Tom Barnes  
Andrew Bush – Absent  
Louie Chavis  
Susan Corbett  
Robert Doerr  
Murlene Ennis – Absent  
Dawn Gillas  
David Hoel  
Eleanor Hopson  
Virginia Jones – Absent  
Daniel Kaminski  
John McMichael  
Clint Nangle  
Larry Powell  
Bill Rhoten  
Earl Sheppard  
Harold Simon  
George Snyder  
Nina Spinelli  
James Streeter  
Ed Sturcken – Absent  
Christopher Timmers  
Louis Walters  
Mary Weber

DOE/Contractors

Terry Spears, DOE-SR  
Michael Mikolanis, DOE-SR  
Sandra Waisley, DOE-SR  
Jim Giusti, DOE-SR  
de'Lisa Carrico, DOE-SR  
Avery Hammett, DOE-SR  
Dave Hepner, DOE-SR  
Crissy Waller, DOE-SR  
Nancy Kane, DOE-SR  
Thomas Johnson, DOE-SR  
Jim Folk, DOE-SR  
Maxcine Maxted, DOE-SR  
Kim Cauthen, SRNS  
Kristen Huber, SRNS  
Lindsey MonBarrens, SRNS  
Rick McLeod, SRNS  
Jesslyn Pearson, Time Solutions  
James Tanner, Time Solutions  
Tina Watson, Time Solutions

Agency Liaisons

Shelly Wilson, SCDHEC  
Kim Brinkley, SCDHEC  
Susan Fulmer, SCDHEC  
Heather Cathcart, SCDHEC  
Sandra Snyder, SCDHEC  
Trey Reed, SCDHEC  
Greg O'Quinn, SCDHEC  
Jennifer Hughes, SCDHEC

Stakeholders

Marilyn Blanchard  
Wayne Rickham  
Derrek Asberry  
Meg Mirshak  
Liz Goodson  
Bernice Johnson Howard  
Chuan Wu

Welcome & Agenda Review

CAB Chair Harold Simon welcomed everyone to New Ellenton, SC. He thanked the CAB Support Team for the meeting arrangements and opened the meeting. CAB Facilitator, Tina Watson, Time Solutions, welcomed everyone to the meeting. She reviewed the Meeting Rules of Conduct and agenda. She stated a public comment period was scheduled for the end of the meeting and then allowed CAB Chair Simon to discuss the Environmental Management Site Specific Advisory Board (EMSSAB) Chairs' draft recommendation.

Discussion: EMSSAB Chairs' Meeting Recommendation about the Waste Isolation Pilot Plant

CAB Chair Simon discussed a draft recommendation that was created as a result of the April 2015 Chairs' meeting. He explained the draft recommendation was discussed at the May 2015 Full Board meeting in Savannah, Georgia (GA); however, the CAB postponed voting on the draft until the July Full Board meeting. CAB Chair Simon said the CAB would vote on the Chairs' recommendation the following day and said content of the draft recommendation could not be changed. There was no discussion on the draft recommendation and CAB Chair Simon began discussing the position statement up for renewal.

Position Statement Renewal Discussion

Position Statement for the Savannah River Site's Citizens Advisory Board on using SRS for Interim Storage of Spent Nuclear Fuel

CAB Chair Simon mentioned the position statement up for renewal was sent to the CAB members in advance. He asked if anyone had comments, changes, or feedback. CAB member Dawn Gillas said she did not agree with the position statement because she felt the CAB should keep an open mind. She said she also felt the position statement was very close-minded. She

said she would like to provide more open-minded comments throughout the position statement since not everyone in the community was against keeping an open mind about what could happen in the future at SRS. CAB member Susan Corbett said she was not interested in changing any of the information in the position statement since she felt SRS should not be considered ever for interim storage of any kind.

CAB member Louis Walters read a sentence in the position statement which said, "In 2010 President Obama ordered work on the licensing process for Yucca Mountain to cease and all funding for licensing was withdrawn. No scientific or safety reasons were given. The decision was described by the General Accounting Office (GAO) as a political decision." CAB member Walters asked if any of the CAB members had information about where the sentence came from because he said he felt the CAB should not make any political statements. CAB member Gillas said she could not provide the exact reference where General Accounting Office (GAO) made the statement; however, she said it was 100 percent a political decision since there was no safety basis for cancelling Yucca Mountain. CAB member Daniel Kaminski suggested having a footnote for the reference or deleting the last sentence since the other two sentences could stand on their own. CAB member Corbett said she agreed with CAB member Kaminski's suggestion. CAB member David Hoel said he felt the sentence should be removed also. CAB member Mary Weber asked why the position statement had not been updated with any current information. She asked how the CAB could renew a position statement without information about what has happened since 2013.

CAB member Gil Allensworth asked if the CAB really needed to take a position on something that may or may not occur in the future. CAB Chair Simon said the CAB would continue with the progress to make recommended changes to the position statement. CAB Chair Simon said the position statement would come before the CAB the next day and that was where the democratic process took place. CAB Chair Simon said if the position statement was approved, then the CAB would proceed and if the position statement was not approved it would expire. CAB member Allensworth said he understood the democratic process of changing things in the position statement, but he asked if the CAB was "borrowing trouble" by renewing the position statement. CAB member Hoel explained without a repository something had to be done with the spent nuclear fuel (SNF). CAB member Hoel said the SNF could be kept in the current storage location or stored in some regional interim storage locations. He stated DOE was evaluating different alternatives and when the alternatives were evaluated, DOE would determine all reasonable locations for the SNF; however, CAB member Hoel said he felt SRS was a reasonable alternative. He mentioned the CAB might not agree with SRS being a location, but SRS had been conducting nuclear operations and storing SNF for 50 years, which made SRS a reasonable alternative. CAB member Hoel said he felt the CAB should go on record with the position statement about whether SRS should be used as an interim storage site so DOE knew how local citizens felt about the option.

CAB member Corbett mentioned legislation had been introduced and there seemed to be a "big push" for interim storage, which was what the Blue Ribbon Commission ended up recommending. CAB member Corbett said there did not seem to be any stomach for taking on the idea of looking for a permanent repository. CAB member Corbett explained the Blue Ribbon Commission and now some legislatures in Congress were moving rapidly to craft legislation about the issue. She explained that where the SNF would go depended on how accommodating the communities. She said she felt SRS was within the top 5 locations as a possibility simply because similar materials were already at SRS. CAB member Allensworth asked CAB member Corbett if specific legislation was available and CAB member Corbett said she would provide him a copy the following day.

CAB member John McMichael asked who drafted the position statement. CAB Chair Simon said a previous CAB member, Mr. Ed Burke. CAB member McMichael said it would be helpful for new CAB members to receive background information for documents such as position statements to explain why a document was originally written. CAB member McMichael said he agreed with CAB member Allensworth because he was uncertain if the position statement fell into the purview of the CAB's mission. CAB member McMichael said he was not agreeing or disagreeing with the way the position statement was written; however, he felt it would be helpful if new CAB members had more background information in order to provide input on future documents that were up for renewal. CAB Vice Chair Nina Spinelli said the new CAB members could find the meeting minutes from when the position statement was originally adopted on the CAB's website. CAB Chair Simon asked if CAB member Walters, CAB member Gillas, and CAB Vice Chair Spinelli could revise the wording later in the afternoon before the CAB voted on the position statement. They agreed to do so.

#### Presentation: Work Plan Update – Jesslyn Pearson, Time Solutions

Mrs. Pearson provided an update on the CAB's Work Plan by highlighting the topics each committee chair scheduled to be completed throughout the year. She then discussed which Work Plan topics would be completed at the meeting, the next Committee meetings, and those needing to be rescheduled.

#### 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 focus. He provided a recommendation status update, stating recommendation 323 was open. He said a draft recommendation titled, "Improve Public Participation," cosponsored with the Facilities Disposition & Site Remediation (FD&SR) Committee, would be discussed later in the meeting. CAB member Doerr announced the next S&LM Committee meeting was scheduled for August 11, 2015,

from 4:30-6:20 at the New Ellenton Community Center. He then introduced Mr. Dave Hepner, DOE-SR, to begin his presentation.

Presentation: Small and Minority Owned Business Engagement at SRS – Dave Hepner, DOE-SR

Mr. Hepner said the purpose of his presentation was to fulfill a 2015 S&LM Work Plan topic by providing information about the benefits and driving regulations behind the utilization of small businesses at SRS. He stated in the Small Business Act of July 30, 1953, Congress created the Small Business Administration (SBA), to aid, counsel, assist and protect the interests of small business concerns. He explained the charter stipulated SBA would ensure small businesses a fair proportion of government contracts and sales of surplus property. Mr. Hepner stated the United States government was the largest single purchaser of goods and services in the world, awarding approximately five hundred billion dollars in contracts annually. He mentioned the SBA's Office of Government Contracting and Business Development worked with federal agencies to award at least 23 percent of all prime government contract dollars to small businesses and assist federal agencies to meet specific statutory goals for small business contracts. He listed the types of small businesses, which included: small disadvantaged small businesses, women-owned small businesses, service-disabled veteran-owned small businesses, and historically underutilized business zones (HUBZone) small businesses. Mr. Hepner mentioned each year SBA's Business Development Program, DOE and its contractors assisted eligible socially and economically disadvantaged individuals in developing and growing business through one-on-one counseling, training workshops, networking opportunities, and management and technical guidance. He listed various procurement regulations that were important for small business. He stated the Federal Acquisition Regulation (FAR) was a substantial and complex set of rules governing the federal government's purchasing process. He also explained the FAR ensured purchasing procedures were standard, consistent, and conducted in a fair manner. He listed federal government statutory goals for small business procurement before he discussed the rationale for using small businesses at SRS. Mr. Hepner explained SRS was a government funded site and the law required the use of small business; however, he stated a significant number of jobs created in the United States were small business jobs. He said types of small business at SRS included staff augmentation, material suppliers, construction, and consulting companies. Mr. Hepner commented that the vessels for the Salt Waste Processing Facility were constructed by a small business. He then explained how small businesses were chosen through the competitive process and self-marketing. He showed the small business breakdown for contractors at SRS. He explained Savannah River Nuclear Solutions (SRNS) conducted business with over 1,372 small businesses in the last three years and the total dollars in fiscal year (FY) 2014 was approximately 84 million dollars. He said Savannah River Remediation (SRR) conducted business with over 412 small businesses since 2009, with the total dollars in FY 2014 being approximately 31 million dollars. He said Parsons conducted business with over 327 small businesses since the start of the project, with the total dollars in FY 2014 being approximately 44 million dollars. He stated Centerra purchased goods from several small businesses and the total dollars for FY 2014 was approximately 3 million. He said DOE conducted business with about 50 small businesses and the total dollars for FY 2014 was approximately 13.5 million dollars. Mr. Hepner provided a list of points of contact stating these were the people to reach out to if someone knew a small business that wanted to conduct business with DOE-SR or contractors at SRS. Mr. Hepner summarized his presentation stating small businesses were the backbones of society and often times the performance of small business was equal to the performance of any large business. He mentioned DOE-SR, an advocate of small businesses for 20 years, felt small businesses were the best way to accomplish work for SRS.

CAB member Earl Sheppard asked what type of companies were important. Mr. Hepner explained a majority of companies were performing staff augmentation and services. Mr. Hepner also mentioned small businesses with NQA-1 certifications were very sought after. CAB member Sheppard said he was impressed by the small business numbers. Mr. Hepner thanked CAB member Sheppard and stated DOE-SR had done a lot of work with the contractors to ensure contractors were looking at small businesses first.

CAB member Walters asked Mr. Hepner if there was a breakdown that indicated the amount of employees employed by small businesses. Mr. Hepners replied that normally staff augmentation activities were tracked; however, the breakdown for all other small businesses was not tracked that way. Mr. Hepner said if a consulting company was performing work, the number of employees working for the consulting firm were not counted. CAB member Walters asked where and how often the small business events Mr. Hepner attended were held. Mr. Hepner said the events had been held in Columbia, SC, Augusta, GA, and Atlanta, GA. Mr. Hepner said sometimes the events were annual; however, Mr. Hepner commented the number of events increased based on if there were special upcoming projects.

CAB member Hoel mentioned that Mr. Hepner said the vessels manufactured for the SWPF were originally contracted to a small business; however, he said he recalled the contractor failing miserably. CAB member Hoel asked Mr. Hepner if his recollection was correct. Mr. Hepner replied that the small business did have some issues. CAB member Hoel said the result of the business failure delayed the startup of the SWPF by approximately a decade. He then asked if DOE had conducted a formal lessons learned report or root cause analysis for the failure. Mr. Hepner commented he did not think DOE completed a formal lessons learned; however, Mr. Hepner mentioned a due diligence process was established to ensure a similar situation did not occur in the future. CAB member Hoel stated no lessons learned or root cause analysis for a catastrophic failure were conducted. Mr. Hepner replied a lessons learned was not performed on the competition or the procurement side; however, there may have been a lessons learned completed on the engineering side. CAB member Hoel asked how the CAB could find out if a lessons learned had been completed on the engineering side. Mr. Terry Spears, SRS Deputy Manager, said as far as he

knew, DOE-SR did not conduct a formal root cause analysis. Mr. Spears explained the delays, with respect to the SWPF vessels, were indicative of the deterioration of the NQA program at many of DOE's vendors around the complex. Mr. Spears explained that working with that vendor opened DOE-SR's eyes to be more circumspect about assigning NQA-1 work and being more diligent that contractors go into the field and visit both small and other businesses to inspect the progress of work. Mr. Spears said DOE-SR had learned from the past situation that small businesses or any other business with a NQA-1 certification cannot always be relied on simply because of the NQA-1 certification. He explained by getting contractors back in the field, as well as mentoring businesses for how to deliver NQA-1 products maybe hopefully in the future DOE could have better success. CAB member Hoel said he understood perhaps some lessons learned were understood and implemented at SRS, but he said DOE had a nation-wide lesson's learned program with the purpose being that sites learn from each other to avoid making the same mistakes. CAB member Hoel shared his opinion saying if a lessons learned report was not developed on the contract failure, the likelihood of other sites incurring the same problem was very high. Mrs. Sandra Waisley, DOE-SR, commented DOE did have databases for lessons learned and best practices. She said DOE-SR would get back to the CAB. Ms. Waisley said DOE took those types of incidents very seriously. She also commented that when she managed the Quality Assurance and Standards Office at Department of Energy – Headquarters (DOE-HQ), significant time was spent running workshops for vendors and training them. She stated it was a challenge to always find NQA-1 qualified firms.

CAB member Kaminski asked if there were any specific types of utilized small businesses that were doing better or worse than others. Mr. Hepner said the only type of small business goal DOE did not meet was the HUBZone. CAB member Kaminski referenced the FAR and asked if any of the suppliers at SRS experienced a recent FAR audit. Mr. Hepner said there were no FAR audits, but there were audits. CAB member Kaminski asked if the audits were conducted internally. Mr. Hepner said the audits were conducted by the Defense Contract Audit Agency and sometimes one of the big eight firms also conducted reviews. CAB member Kaminski asked if the audits showed FAR compliance. Mr. Hepner said no issues had been identified. CAB member Kaminski then asked if there were any other certifications suppliers should be seeking besides the NQA-1. Mr. Hepner said certifications for certain jobs varied; however, if a company wanted a small business to be certified in something other than a NQA-1, that certification would be located specified in the statement of work.

CAB member Allensworth asked if the SWPF failure CAB member Hoel referenced was a failure because of the small business or could the failure have occurred if a large business also experienced the same failure. Mr. Hepner said the incident could have happened to any company in the NQA-1 arena, including a major manufacturing company as well as a small business. Mrs. Waisley commented DOE conducted assessments of operations at the site and assessments of the vendor shops to make sure the requirements from the main contractor flowed down and were being implemented within the company. She said EM HQ also conducted assessments with small businesses.

CAB member Hoel asked Mr. Hepner if "his shop" conducted assessments of small businesses. Mr. Hepner said if a company turned in a proposal, a review was conducted to determine if the company was competent and qualified to handle the contract. CAB member Hoel said that was only the due diligence process, which CAB member Hoel said was not what Mrs. Waisley was referring to. CAB member Hoel said he was talking about assessments of performance and he asked Mr. Hepner if his organization had conducted any assessments of performance of small business contractors. Mr. Hepner replied, "No sir" and CAB member Hoel asked "Why not?" Mr. Hepner replied that procurement did not perform that action since it would be the requirement of the requesting organization and the Quality Assurance function. CAB member Hoel asked Mr. Hepner if a lessons learned was conducted on the contracting operation. Mr. Hepner explained his organization looked at contract operations. CAB member Hoel asked if when Parsons hired a small business to construct the vessels, Mr. Hepners organization did not conduct an assessment of Parsons' procurement of the small business chosen for the complex project. Mr. Hepner said there was a lot of discussion by the Program Office, but not by the contracting office. CAB member Hoel asked Mr. Hepner if an assessment from the acquisition office was completed, which Mr. Hepner replied no.

## Draft Recommendation Discussion

### Improve Public Participation

CAB member Doerr allowed Recommendation Manager, CAB member Hoel, to discuss the draft recommendation which CAB Vice Chair Spinelli originally drafted. CAB member Hoel read the draft recommendation stating CAB members felt public participation could be improved. He read each item number of the draft recommendation before asking the CAB if there was any discussion. CAB member Hoel said as he was drafting the recommendation, he asked the CAB Support Team to conduct some research on the impact of advertising relative to CAB Full Board meeting attendance from 2010 to 2015. Mr. James Tanner, CAB Support Team, showed charts of attendance information, which will be attached to this document. CAB member Hoel said the highest amount of public participation occurred when CAB Full Board meetings were held in Aiken, Augusta, and New Ellenton; however, he pointed out quite fewer people attended meetings in Hilton Head Island, SC, Charleston, SC, Savannah, GA, Columbia, SC, and Beaufort, SC. CAB member Hoel pointed out in 2010 the CAB was doing newspaper advertising. The second graph showed the same information as the first graph, but only in a different graph layout. CAB member Hoel said generally speaking, CAB Full Board meeting attendance, by the public at CAB meetings, regardless of

advertising had remained constant. CAB member Hoel said it did not appear that newspaper advertising made a difference, but he wanted the CAB members to be aware of this data.

CAB member Corbett said she appreciated the draft recommendation. She said she agreed the CAB should have more meetings in different locations. CAB member Corbett said the increased amount of public attendance in May and July of 2013 was due to the CAB voting on the SNF position statement. CAB member Corbett said she felt the amount of meeting participation was higher in Augusta, Aiken, and New Ellenton because people that lived around SRS were more aware and more interested; however, she felt the CAB should hold meetings in other locations to better educate citizens on SRS issues so they feel prompted to attend future CAB meetings. CAB member Corbett said she felt it was also important to hold CAB Full Board meetings during times when people were not working.

CAB member Kaminski thanked CAB member Hoel for writing the draft recommendation. He said he agreed with CAB member Hoel that paper advertising may not be the most cost effective way to attract members of the public. CAB member Kaminski asked how the CAB and CAB Support Team was currently advertising CAB Full Board and Committee meetings. Mrs. Watson mentioned CAB meetings attracted reporters such as Derrek Asberry, Aiken Standard, who was currently at the meeting.

Mr. Jim Giusti, DOE-SR, said even when CAB meetings were held in different places, the CAB Support Team reached out to newspapers and television stations to provide information about CAB meetings; however, it was up to the television stations and newspapers to determine what meetings or topics they cover. Mr. Giusti said DOE-SR conducted Information Pods last year and were evaluating whether to continue them this year. Mr. Giusti said DOE-SR and the CAB Support Team would continue evaluating outreach methods such as social media; however, the most effective outreach method for the Information Pods was contacting local universities and schools.

CAB member Clint Nangle commented that meeting content was what drove attendance and participation, which was why the May 2013 Full Board meeting was so highly attended.

CAB Vice Chair Spinelli said she felt the reason attendance was low for CAB meetings was because meetings were held during the day when most people were working and most people did not use paid time off to attend CAB meetings. She asked if the charts included attendance for DOE-SR and other contractors that often attended CAB meetings. Mr. Tanner informed CAB Vice Chair Spinelli that DOE-SR and other contractors were not included in the chart data. CAB Vice Chair Spinelli explained her original intent of the draft recommendation was based off a past public comment that members of the public looked read about CAB meetings in the local newspaper.

CAB member Sheppard addressed CAB member Hoel stating when the Full Board meeting was held in Beaufort, SC last year, he himself contacted the Mayor's office, visited several churches, contacted personal people and he wished more people would have attended the CAB meeting. CAB member Sheppard said he felt it was strange more people did not attend the meeting since Beaufort and other cities were the end users of the Savannah River. CAB member Sheppard said he felt slighted himself with the mediocre participation.

CAB member Walters asked if the chart data included attendance at Information Pods held by DOE-SR. CAB member Hoel said no and explained that this data was only CAB meetings. CAB member Walters said the CAB should try to reach out to high schools in respective areas where they lived. CAB member Walters said the opportunity to get on radio perhaps could be a possibility. Mr. Giusti said DOE-SR would remain open to any new approaches for CAB meetings as the CAB recommended them to DOE-SR; however, Mr. Giusti said he had to figure out how to afford the new approaches as well as identify how it fits into the CAB's mission.

CAB member Allensworth thanked Mr. Giusti for addressing the issue of cost and asked if doing what this draft recommendation was suggesting was even financially possible.

CAB member Gillas commented that certain topics discussed at CAB meetings, such as the position statement on SNF, often attracted public interest groups; however, she explained that rarely average citizens attended. CAB member Gillas said in order to attract the public the CAB should determine what drives the public. CAB member Gillas said an important factor that often drove the public was the fact that future generations of current citizens would possibly still be impacted by SRS.

CAB member George Snyder said he lived in Aiken and several of his neighbors and friends knew he was a CAB member. He explained that morning before coming to the CAB meeting he attended another meeting. He was asked during the meeting what he had planned for the day and when he replied that he had a CAB meeting, there were no questions about the meeting or any issues at SRS. CAB member Snyder said there seemed to not be any real concern about SRS unless there was something big in the paper.

CAB member McMichael said he served on several other boards and he commented that the amount of public turnout for CAB meetings was no different than what he saw at other public meetings. He said people would be involved in things that mattered

to them, impacted their wallets, or impacted their way of life; however, he explained the CAB could not manufacture interest. CAB member McMichael said maybe the CAB could do more to advertise and publicize the CAB website. CAB member Hoel said he spoke with the CAB Support Team about using the CAB Facebook page to increase public awareness. He then said he received notices in the past week about the CAB meeting and in those notices, the CAB Support Team included a link to the SRS Website. Ms. Watson also pointed out that Mrs. Pearson had been "live posting" throughout the CAB meeting to the CAB Facebook page. CAB member Hoel also commented he previously asked the CAB Support Team what they felt the most effective method of outreach was and they responded that email and social media seemed to be the most effective and cost effective methods. CAB member Hoel said he appreciated the CAB Support Teams efforts to increase the CAB's social media presence.

CAB member Kaminski said he agreed that CAB meetings and SRS public tours should be held during times when members of the general public, not only retirees could attend. He even mentioned that none of the SRS public tours were available on the weekends.

CAB member Gillas said the CAB Committee meetings were scheduled in the evenings when most people are off work; however, she said sometimes there were actually fewer members of the public at committee meetings even though those meetings. CAB member Gillas asked members of the public at the meeting to raise their hands. CAB member Gillas counted out loud and stated only there were only about seven members of the public in attendance.

Ms. Bernice Johnson Howard, Georgia Women's Action for New Directions (GAWAND), stated she was glad the CAB was discussing the issue of public involvement since it was indeed why more people did not attend. She said CAB meetings were held in key working hours and she said she felt the public would interact more if CAB meeting locations were rotated. Ms. Johnson Howard said she drove from Waynesboro, GA to attend the CAB meeting and she was retired, which was the only reason she was able to attend.

CAB member Corbett pointed out the draft recommendation would not be effective if DOE did not increase the amount of money budgeted to the CAB. CAB member Hoel said she had a good point, but it would not hurt the CAB to ask DOE. CAB member Hoel thanked the CAB members and public for all the feedback on the draft recommendation. CAB member Doerr said the draft recommendation should be forwarded to the next day to be voted on by the CAB.

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

CAB member Eleanor Hopson stated the purpose of the A&O Committee before listing 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 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 meet after the CAB meeting was adjourned.

#### 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 August 11, 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.

#### Presentation: Department of Energy Savannah River Operations Safety Culture Improvement Initiatives and Oversight Process – Scott Nicholson, DOE-SR

Mr. Nicholson stated the purpose of his presentation was to discuss safety culture. He defined safety culture as an organizations values and behaviors modeled by its leaders and internalized by its members, which serve to make safe performance of work the overriding priority to protect the workers, public, and the environment. He provided background information about the SRS Safety Culture/Safety Conscious Work Environment (SCWE) self assessments. He commented that depending on who was asked, safety culture could be a difficult topic since almost everyone defined "safety" differently. He said the SRS final SCWE self assessment reports issued and site-wide evaluation was submitted to DOE-HQ. He said DOE-HQ did an evaluation on the self-assessment reports and also received the other reports from sites across the DOE complex. Mr. Nicholson said SRS Safety Culture Sustainment Plans, addressing sustainment tools and implementation plans, were provided to EM HQ in September 2014 and DOE-SR recently received approval of the DOE-SR Safety Culture Sustainment Plan. He stated the Sustainment Plan was really a tool for DOE-SR to evaluate the SCWE. He said the SRS contractors were also required to develop these plans. Mr. Nicholson discussed DOE-SR Sustainment tools, which included cultural growth initiative, safety culture monitoring panel, self assessments, benchmarking, and performance indicators. He explained the cultural growth initiative was actually developed a few years ago and DOE-SR actually had Champions, which were managers or supervisors running the Staff Advisory Committee. He explained a major change for the Staff Advisory Committee was that

DOE-SR brought staff members to be advisory for the committee. We did not want it to only be managers, supervisors giving information to the staff level. Mr. Nicholson listed different items relating to the Cultural Growth Initiative, which included training, on and off boarding programs, DOE Dashboard, contractor partnering sessions, and a mentoring program. He listed DOE-SR Safety Culture training that was already initiated before the self assessment, which included StrengthFinder 2.0, Beyond Service Excellence, Performance Improvement Plan, holding employees accountable for performance and conduct, DOE oversight and implementation, site tracking analysis and reporting (STAR), and self assessments. Mr. Nicholson discussed SCWE for Senior Leaders (DOE and contractor) which was training provided by DOE-HQ; however, he explained DOE-HQ was developing another training course called "SCWE for Senior Leaders," and implementation would be determined by the Safety Culture Improvement Panel. He discussed training completed in December 2014, which was the Overview of Safety Culture Assessment Process, which described how DOE and contractors should be administering self assessments to their staff and workforce. He listed various oversight program drivers stating DOE Order 226.1B Implementation of Department of Energy Oversight Policy was the main order; however, he listed other drivers which included DOE Order 414.1D Quality Assurance, DOE P 420.1, DOE Nuclear Safety Policy, and DOE P 450.4 Integrated Safety Management Policy. He said oversight organizations included the Assistant Managers for Nuclear Material Stabilization, Assistant Manager for Waste Disposition, Assistant Manager for Infrastructure and Environmental Stewardship, and Assistant Manager for Organizational Culture, Safety, and Quality Assurance Management as well as the SWPF Project Office and the Office of Safeguards, Security and Emergency Services. Mr. Nicholson then discussed the oversight program. He said DOE-SR evaluated federal and contractor operations through operational awareness activities, facilities, operations, and program assessments, and contractor assurance systems (CAS). He explained DOE-SR validated the CAS through requirement flow down, safety and health performance, organizational responsibilities and accountabilities, audits, peer reviews, assessments, self assessment results, feedback and improvement activities, contracting officer communications, and trend and analysis.

CAB member Gillas asked if there had been any change in indicators that all the new methods were helping actual performance on the floor. Mr. Nicholson said it was hard to gauge the two; however, he explained various programs could be developed but it really took involvement from staff and management. CAB member Gillas asked if Mr. Nicholson had any indicators that showed there were fewer accidents or incidents. Mr. Nicholson said hopefully time would tell, but there would eventually be specific areas DOE-SR could evaluate to determine weaknesses.

CAB member Hoel asked what off-boarding programs involved. Mr. Nicholson said off-boarding involved getting feedback from employees before they left jobs at SRS. Mr. Nicholson said it was difficult to bring another employee in to replace someone who had worked at SRS for several years, so DOE tried to capture history of the job. Mrs. Waisley commented that off-boarding was a challenge for DOE and many other federal agencies. Mrs. Waisley explained off-boarding could be considered as knowledge management and transfer of knowledge, which meant instead of walking out the door without transitioning, unfortunately many people decide to retire in a moments' notice and there was not much time to transition employees. CAB member Hoel discussed on-boarding stating he understood what DOE-SR was trying to achieve by getting new hires to understand safety culture, but often times new employees bring "fresh eyes." CAB member Hoel asked if it was part of the on boarding program to take advantage of the fresh eyes for new employees. Mr. Nicholson said his organization had been conducting a lot of hiring and part of the hiring process was developing training for new employees to learn the "DOE way."

CAB member Kaminski asked if there was an indication of what the average number of recordable incidents per year was. Mr. Nicholson said DOE tracked total recordable cases and days away restricted cases; however, Mr. Nicholson said he hated to place a limit on those incidents, but DOE-SR was well below that threshold right now. CAB member Kaminski asked if that was a self threshold or a national benchmark. Mr. Nicholson said DOE-HQ provided the threshold. CAB member Kaminski asked if any of the contractors at SRS were worse regarding safety than others. Mr. Nicholson said incidents in construction areas were higher. Mr. Nicholson said the Management and Operations (M&O) contractor SRNS and Liquid Waste contractor SRR, had relatively the same numbers. Mr. Nicholson also mentioned DOE-SR actually set limits well below DOE-EM requirements.

CAB Chair Simon then asked how low DOE-SR went to get information for off boarding. Mr. Nicholson said everyone went through an off boarding exit interview.

CAB member Hoel asked why Parsons' sustainability plan was conditionally approved. Mr. Nicholson explained DOE wanted to look at construction sites and DOE-HQ identified three to four sites across the DOE complex that had to have an independent team come in and evaluate the programs. Mr. Nicholson said when Parsons had their independent evaluation conducted an independent team performed an assessment of Parsons' program. Mr. Nicholson explained when the independent evaluation was complete, Parsons spent time describing areas of improvement, what their program meant, and explaining how the plan would develop into the future. Mr. Nicholson said DOE-SR received the EM-1 guidance to develop the sustainability plans, which was given to Parsons. He said Parsons reviewed the EM-1 guidance and instead of developing a new plan Parsons pulled the independent plan that was already completed, since they felt the independent plan satisfied the criteria for the sustainability plan. Mr. Nicholson explained that discussions were held between the SWPF Project Office and Parsons and the decision was made that the independent plan Parsons already had basically covered the DOE-HQ criteria; however, he mentioned DOE-SR did not know if DOE-HQ would approve Parsons' original independent plan or not, but DOE-SR decided to send the plan to DOE-HQ since it covered enough of the areas. Mr. Nicholson said formatting issues and the ability to locate

information easily in the independent plan were a few things Parsons was fixing. He explained Parsons' independent plan was very large and difficult for HQ to locate information, which he said was basically why Parsons' sustainability plan was conditionally approved.

## Draft Recommendation Discussion

### Health Effect Reporting by the Savannah River Site

CAB member Barnes briefly reviewed the draft recommendation and shared a few grammatical corrections within the document. He suggested adding "nuclear" in the first sentence of the background section. He also suggested changing "reached" to "evaluated" on the first page statement number three. CAB member Barnes also suggested lowercasing "POD" since it was not an acronym in item number two of the draft recommendation. Lastly, in item number three of the draft recommendation he asked the word "is" to be changed to "are." He then read each item number of the draft recommendation before asking if there was any further discussion. CAB member Gillas suggested in the first paragraph changing "chemicals that were used by nuclear reactors" to "chemicals that were used by nuclear facilities." She also asked for clarification on what the CAB was actually asking DOE-SR to do in item number three of the draft recommendation. CAB member Barnes said item number three was very important for DOE to acknowledge. CAB member Hoel said he was confused what the CAB was requesting in item number one. CAB member Hoel said the Agency for Toxic Substances and Disease Registry's (ATSDR) study was a one-time study that evaluated SRS monitoring data going. CAB member Hoel asked if CAB Vice Chair Spinelli was advocating in item number one that ATSDR conduct continuous monitoring of SRS because that was not ATSDR's job. Ms. Watson explained the draft recommendation was originally written by CAB Vice Chair Spinelli who had to leave the meeting early. CAB member Barnes said the issues could be further discussed tomorrow before voting on the draft recommendation.

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

CAB member Earl Sheppard read the committee's purpose and listed committee members. He provided a recommendation status update, stating the WM Committee had no draft, open, or pending recommendations. He announced the next WM Committee meeting was scheduled for August 4, 2015, at the New Ellenton Community Center in New Ellenton, SC. He said there were no presentations scheduled for today or tomorrow. CAB member Sheppard praised DOE, the contractors, and the CAB Support Team for the tour a few months ago. He said he thoroughly enjoyed the tour and his experience at Savannah River Ecology Laboratory (SREL).

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

CAB member Larry Powell read the committee's purpose before listing committee members. He provided a recommendation status update stating the NM Committee had no draft, open, or pending recommendations. He announced the next NM Committee meeting was scheduled for August 4, 2015, at the New Ellenton Community Center in New Ellenton, SC. CAB member Powell said there were no presentations scheduled for the meeting; however, he said a presentation on K-Area would be presented the following day.

## Public Comments

Ms. Bernice Johnson Howard, GAWAND, thanked the CAB, DOE-SR, and the CAB Support Team for the meeting. She reminded everyone that the quality of life, and life itself, was affected by the decisions made at CAB meetings.

Ms. Liz Goodson, public, said she retired from SRS 17 years ago. She said she came to SRS in 1972 when SRS was designated a National Environmental Research Park and watched as the forestry, ecology, and DuPont researchers studied SRS. She asked if environmental research was still being done at SRS and if there were universities and colleges able to study SRS. Mr. Spears, DOE-SR, said it was good to see her since it was hard to believe it had been 17 years since she retired. Mr. Spears said the SREL continued to lead the environmental research activity.

Ms. Marilyn Blanchard, public, jokingly commented that if New Mexico and Texas wanted our nuclear waste and she did not, why could the waste not be given to those states.

-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 (SRS) Citizens Advisory Board (CAB) – Full Board Meeting  
New Ellenton, South Carolina (SC)  
July 28, 2015

Attendance – Tuesday, July 28, 2015

<u>CAB</u> Gil Allensworth Tom Barnes Andrew Bush – Absent Louie Chavis Susan Corbett Robert Doerr Murlene Ennis – Absent Dawn Gillas David Hoel Eleanor Hopson Virginia Jones – Absent Daniel Kaminski John McMichael Clint Nangle Larry Powell Bill Rhoten Earl Sheppard Harold Simon George Snyder Nina Spinelli James Streeter Ed Sturcken – Absent Christopher Timmers Louis Walters Mary Weber	<u>DOE/Contractors</u> Terry Spears, DOE-SR Michael Mikolanis, DOE-SR Jim Giusti, DOE-SR de’Lisa Carrico, DOE-SR Avery Hammett, DOE-SR Crissy Waller, DOE-SR Nancy Kane, DOE-SR Thomas Johnson, DOE-SR Jim Folk, DOE-SR Allen Gunter, DOE-SR Patrick McGuire, DOE-SR Maxcine Maxted, DOE-SR Kim Cauthen, SRNS Kristen Huber, SRNS Cathy Lewis, SRNS Jay Johnson, SRNS Jeff Allender, SRNL Larry Ling, SRR Rick McLeod, SRNS Jesslyn Pearson, Time Solutions James Tanner, Time Solutions Tina Watson, Time Solutions	<u>Agency Liaisons</u> Shelly Wilson, SCDHEC Kim Brinkley, SCDHEC Susan Fulmer, SCDHEC Heather Cathcart, SCDHEC Sandra Snyder, SCDHEC Trey Reed, SCDHEC Greg O’Quinn, SCDHEC Jennifer Hughes, SCDHEC  <u>Stakeholders</u> Rose Hayes Cee Cee Anderson Che Long Samantha Giordano Sarah Beaulieu Liz Goodson Bernice Howard Johnson Tom Coleman Nancy Bobbitt Kelly O’Neal Karen Patterson
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CAB Chair Opening and Update – Harold Simon, CAB

CAB Chair Harold Simon opened the meeting and asked everyone to stand for the Pledge of Allegiance and National Anthem. 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 allowed CAB Chair Simon to begin his update.

CAB Chair Simon welcomed everyone to the meeting, including the new SRS Manager, Mr. Jack Craig, who unfortunately was unable to attend the meeting. He reminded everyone the Full Board meeting was more formal and served as the CAB’s official business day. He mentioned how the CAB appreciated public input and encouraged the public to continue participating in CAB meetings. 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. CAB Chair Simon discussed the CAB’s projected budget stating he wanted to know how much funding was available for the CAB to complete activities throughout the year. He also stated he would like the CAB budget to include funding for CAB members to travel to Environmental Justice meetings. He then discussed attendance at the Executive Committee meeting stating Committee Vice Chairs were encouraged to attend the Executive Meeting as non-voting members, which would help train Vice Chairs to step in if a Committee Chair was absent or to have a future role as a Committee Chair. CAB Chair Simon mentioned a proposed change to the annual Internal Processes Review. He suggested each Committee review the Internal Processes and submit any proposed changes to the CAB Support Team by September 22, 2015. He explained by the November Full Board meeting, the CAB Support Team would provide the CAB a “marked-up” version to review and in February, at the Education and Process Session (EPS), the CAB would review the proposed changes and the CAB Support Team would forward the revised document to the DOE-SR CAB DDFO’s for review. He also mentioned all newly appointed CAB members, in receipt of appointment letters in January or February, would be invited to the annual EPS. CAB Chair Simon then congratulated Mr. Doug Hintze, DOE-SR, who recently accepted a position as the Manager for the Los Alamos Field Office. He thanked Mr. Hintze for serving in the past as a DDFO

and for providing several presentations to the CAB. CAB Chair Simon addressed voting on the Environmental Management Site Specific Advisory Board (EMSSAB) Waste Isolation Pilot Plant (WIPP) Chairs' Recommendation.

#### Voting: EMSSAB Chairs' Meeting Recommendation about the Waste Isolation Pilot Plant

CAB Chair Simon addressed the EMSSAB Chairs' draft recommendation about WIPP, which was forwarded in advance to the CAB members for review. He said local boards could only vote on EMSSAB Chairs' recommendations and were not able to provide input or make changes to the draft Chairs' recommendation. He opened the floor for a vote and the CAB approved the EMSSAB Chairs' recommendation with 21 votes, no oppositions, and no abstentions.

#### Voting: Position Statement Renewal

#### Position Statement for the Savannah River Site's Citizens Advisory Board on using SRS for Interim Storage of Spent Nuclear Fuel

CAB Chair Simon discussed the position statement, which was originally drafted in 2013, renewed in 2014, and up for renewal in 2015. He asked the CAB if there was any further discussion.

CAB member Gil Allensworth said he reviewed the position statement the night before and he asked if the CAB was simply renewing the position statement or were edits allowed. CAB Chair Harold said the CAB was renewing the position statement. CAB member Allensworth asked if the edits made to the document the day before should even be included since position statements were not supposed to be edited. CAB member Allensworth said he was under the impression that if a position statement was renewed it had to be left as it was. CAB member Allensworth said if the position statement up for renewal was going to be edited should the CAB simply vote to let the current position statement expire and then rewrite another position statement with updated information. CAB member Simon said the CAB was renewing the position statement; however, there were things in the position statement up for renewal that were incorrect, which needed to be updated. CAB Chair Simon said if the position statement needed to be updated he felt the CAB should incorporate the edits. CAB member Allensworth said maybe it was semantics, but if edits were made to the position statement, the CAB really was redoing the position statement, not renewing the position statement.

CAB member Dawn Gillas said the changes she suggested yesterday were ensuring the position statement was technically accurate and not meant to change the intent of the position statement. CAB member Gillas said she still intended to write a minority report. CAB member Allensworth mentioned after the discussion from the day before, he did not understand how the CAB had the authority to issue a position statement. He said he reviewed the CAB mission and charter and unless DOE-SR had asked the CAB to write a position statement, he felt the CAB did not have the authority to do so. He mentioned he also read the meeting minutes from 2014 and it did not appear that DOE-SR asked the CAB to have a position on the topic of the position statement up for renewal. CAB Chair Simon said the CAB was authorized to write position statements and position statements had nothing to do with the CAB's mission or charter. He said the CAB was taking a position on an issue and that was what the position statement represented. CAB member Allensworth said he understood; however, he said he felt the CAB should not be editing the position statement, but simply voting to renew the position statement or let it expire in order to draft a new one.

CAB member John McMichael said he appreciated all the comments and as a new CAB member he really respected the fact that all CAB members had the chance to share their opinions. CAB member McMichael applauded CAB member Louis Walters for sharing his opinions the day before by pointing out statements within the position statement he felt were not acceptable. CAB member McMichael said he also appreciated CAB member Allensworth trying to learn the correct way to conduct CAB business; however, he said he was concerned the CAB was renewing something that had flaws.

CAB member Mary Weber said if the position statement would be the CAB's current position by renewing it, then there were issues with the language and dates on the second page. She said the paragraph beginning with "The need to have..." referenced that no progress had been made in the past four years. CAB member Weber said the word "four" should be removed and put "subsequent" since it had been more than four years now. CAB member Weber also suggested in the following paragraph the word "recently" did not make sense because it had been quite a while since the completion date was moved. The CAB agreed with incorporating CAB member Weber's suggestions.

CAB Chair Simon opened the floor for a vote; the CAB voted to renew the amended position statement with 14 votes of approval, seven votes in opposition, and no abstentions.

CAB Chair Simon explained within the CAB Internal Processes there was an option for submitting minority reports, which would accompany the position statement. CAB member Gillas said she looked at the minority report from two years ago and she felt it was well written. CAB member Gillas said she planned to reiterate the minority report; however, she said she was unable the night before to rewrite parts of the minority report but she said she wanted to go ahead and submit the past minority report again, as it stood, and before the next Full Board meeting she would send the updated minority report to CAB

members who may be interested in putting their names on the report too since there were seven CAB members who opposed renewing the position statement.

CAB member Susan Corbett said since CAB member Gillas planned to rewrite the minority report from two years ago, should the CAB rewrite this position statement reflecting the same sentiment, opposing the storage of spent fuel at SRS, but simply updating relevant information to reflect the changes that have happened since this position statement was originally passed. CAB Chair Simon said the CAB had already voted to renew the position statement. CAB member Corbett said if the CAB had to keep renewing position statements annually should the CAB simply update the information in the position statement. CAB Chair Simon stated that was what the CAB attempted to do the previous day before voting. He also said there was really no need to rewrite the position statement since the CAB already approved it for the next year; however, he encouraged CAB member Corbett remember her suggestion for next year.

A copy of this position statement will be attached to this document.

### Agency Updates

Mr. Terry Spears, Deputy SRS Manager, Department of Energy – Savannah River (DOE-SR)

Mr. Spears welcomed everyone to New Ellenton and thanked members of the CAB and public for the continued interest and support of SRS. He explained Mr. Jack Craig, SRS Manager, was still getting relocated to the area; however, he said Mr. Craig looked forward to attending future CAB meetings. Mr. Spears addressed DOE-SR personnel introducing Mr. Thomas Johnson, DOE-SR, the new Associate Deputy Manager. Mr. Spears allowed Mr. Johnson to say a few words about himself before Mr. Spears recognized Mr. Doug Hintze, DOE-SR, who would be leaving DOE-SR to serve as the Manager at the Los Alamos Field Office. Mr. Spears allowed Mr. Hintze to say a few words. Mr. Hintze said farewell and thanked the CAB for their interest in SRS activities. He also thanked the regulators, who were a vital role in SRS activities. Lastly, Mr. Hintze thanked the CAB Support Team for always doing such a great job. He said he would start his new position on September 20, 2015, and he encouraged anyone visiting Los Alamos to reach out to him.

Mr. Spears continued his update discussing the Liquid Waste Program and tank closure. He said grouting operations for tank 16 began in early June, in early July grouting passed 50 percent, and DOE anticipated tank 16 would be filled with grout by September 2015. He stated Savannah River Remediation (SRR) was preparing to begin grouting tank 12 by September 2015, with final closure expected by May 31, 2016. Mr. Spears mentioned the dispute resolution process relative to the Federal Facility Agreement (FFA) at SRS regarding tank closures. He said regarding tank 12, DOE-SR committed to South Carolina Department of Health and Environmental Control (SCDHEC) and the Environmental Protection Agency (EPA) that DOE-SR would pursue commercial sources for treatment of salt waste, which was done in an effort to expedite tank closure through the issuance of a request for Expressions of Interest by July 31, 2015. Mr. Spears said he was pleased to say DOE-SR met that commitment to issue the Expression of Interest by June 1, 2015. He explained DOE-SR issued the Expression of Interest and then followed up with SRR by holding an industry day in mid-June where industry representatives were provided additional information and the opportunity to provide input so DOE-SR could consider that in potential paths forward for supplemental salt processing. Mr. Spears said DOE-SR was currently working with SRR to review input provided and determining whether to proceed with the release of a Request for Proposal (RFP) in the near future. He discussed the Defense Waste Processing Facility (DWPF) stating for fiscal year (FY) 2015, DWPF had produced 90 canisters so far, bringing the total number of canisters produced to 3,967. He said DWPF was currently in an outage due to issues with an anti-foaming agent that had traditionally been used to retard foaming during boiling of the sludge and prevent carryover during processing. He mentioned the issue was detected during laboratory testing that was conducted late in the spring. He said testing detected there was a spike in levels of flammable gas when antifoam was added; therefore, he said the issue was ongoing and DWPF was in an outage to address the issue. Mr. Spears discussed construction of Saltstone Disposal Unit (SDU) 6, which he said was approximately 62 percent complete. He mentioned construction on the Salt Waste Processing Facility (SWPF) was 86 percent complete and construction completion was scheduled for December 2016 while hot operations were expected to begin by December 2018.

He discussed the Nuclear Materials Program stating as part of DOE-SR's disciplined approach to facility startup, H-Canyon continued phased Readiness Assessments (RA) for portions of spent fuel processing which would purify and separate the uranium from the fission products and other waste materials. He said the RA's were expected to continue into early FY 2016; however, meanwhile, dissolution of spent nuclear fuel continued. He said H-Canyon continued to work on modifications to allow future receipt of Canadian Liquid Target Residue materials. Mr. Spears mentioned HB-Line was working through modifications to the agitators to prevent a recurrence of the March event. He said once the modifications and associated safety analysis were completed, which was anticipated for July 2015, HB-Line would process plutonium feed material for the Mixed Oxide Fuel Fabrication Facility (MOX). Mr. Spears discussed the Canadian Target Residue materials stating the Department was planning on bringing approximately 6,000 gallons of liquids to SRS from the processing of the medical isotope targets that contained highly enriched uranium (HEU) from the Canadian Nuclear Laboratories Limited (CNLL). He said SRS anticipated receiving the HEU solution and processing it through H-Canyon to purify the solution. He explained the

purified HEU solution would be down blended and shipped to the Tennessee Valley Authority (TVA) for fabrication into reactor fuel. Mr. Spears commented that the waste from processing the Canadian Target Residue materials would go into the Liquid Waste Program; however, the amount of waste would only generate approximately one canister of high level waste glass produced in DWPF. He referenced building 235-F stating a RA to allow refurbishment of gloveboxes had been successfully completed and DOE-SR was preparing to begin risk reduction activities. Mr. Spears said in L-Basin, startup testing was completed for the new shielded transfer system (STS), which would allow receipt of the Canadian fuels. He explained L-Area was also preparing for the RA to allow operation of the new STS.

He discussed Environmental Stewardship by mentioning activities for the D-Area Ash Basin. He said construction was ongoing at 488-4D ash landfill, erosion control measures were underway on the southwest and west perimeter, grading of the northern edge of the ash landfill was underway to ensure the stability of the construction site, and construction of the outlet structure within the 488-2D ash basin had begun. He said the finished project would remediate and consolidate three large ash basins and one adjacent landfill. He said remedial actions would be complete by 2019 and would continue to be monitored and maintained as a closed clean-up site. Mr. Spears said SRS negotiated with regulators to perform a follow-up injection of edible oils at the closed TNX area, which helped treat volatile organic compounds (VOCs) in the subsurface. He stated SRS met eight out of eight FFA milestones in June and July to date, and an additional three would be met on or before their July 31, 2015 deadlines. Mr. Spears explained Savannah River Ecology Laboratory (SREL) was engaging with Georgia Women's Action for New Direction (GAWAND) to discuss ways of working together to seek funding to develop an outreach program for local communities in Georgia (GA). He said the outreach program would help GA communities better understand and interpret information generated by radiological monitoring programs within the region. Lastly, he discussed military training stating approximately 120 soldiers from the South Carolina National Guard (SCNG) recently conducted a two-week training exercise at SRS. He said the training included three earthmoving projects that provided the SCNG soldiers with project funded training.

CAB Chair Simon asked if the collaboration between SREL and GAWAND was the result of the past CAB recommendation and assessment SREL conducted. Mr. Michael Mikolanis, DOE-SR, stated yes it was a follow-up to the study SREL conducted on the environmental monitoring. CAB Chair Simon asked if the CAB could have an update on the collaboration efforts of SREL and GAWAND. Mr. Mikolanis said DOE-SR could work with the correct subcommittee to schedule a future presentation.

CAB member Corbett asked if the main isotope going into the SDU 6 was cesium. Mr. Spears said that was correct. CAB member Corbett asked about the mercury issue. Mr. Spears said the issue was not solved; however, significant progress had been made. Mr. Jim Folk, DOE-SR, said from a short-term basis, the issues had been addressed because DOE-SR was able to analyze the material currently in the system. Mr. Folk said the facilities that were shutdown were restarted, but DOE did have a longer term initiative, which involved SRR's development of an expert team to look at the long-term implications and determine how to begin removing mercury from the system. Mr. Folk said the expert team was in a detailed analysis at that time and the report was due in October, which will help identify the best options for beginning to extract mercury.

CAB member Hoel asked Mr. Spears how many responses DOE-SR received for the Expression of Interest on salt waste treatment and disposal. Mr. Folk said he could not share the specific number.

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

Mrs. Wilson said the new SCDHEC Director, Mrs. Catherine Heigel, was very focused on SRS and how it was an issue for SC. She mentioned there were several SCDHEC employees in attendance and she introduced each one. She explained SCDHEC issued permits that governed waste and emissions to air and water and as part of that SCDHEC conducting many inspections at SRS. She said SCDHEC was probably at SRS once a week and sometimes every day. She said if anyone had questions about what was going on at SRS from a SCDHEC perspective, they could contact Mrs. Kim Brinkley, Mr. Trey Reed, and Mr. Greg O'Quinn since they were the three individuals most familiar with the day-to-day SRS activities. Mrs. Wilson said SCDHEC also spent a lot of time on the cleanup of the soil, groundwater, and other legacy waste streams and if anyone had questions about those issues they could contact Mrs. Susan Fulmer, Mrs. Heather Cathcart, and Mrs. Sandra Snyder. Mrs. Wilson said she wanted to make sure CAB members were aware of all the SCDHEC resources available to them. She said of the things SCDHEC regulated, the high level waste was the biggest remaining challenge, which was commonly referred to as the "single most environmental threat in SC." She said SCDHEC was very pleased that tank 16 was being grouted. She said SCDHEC recently had a public notice for a closure module, which outlined the plans for how tank 12 was proposed to be closed. She said the Nuclear Regulatory Commission (NRC) provided comments; however, she said SCDHEC would be approving the tank 12 closure module soon since after SCDHEC reviewed the NRC's comments, there was nothing adverse so SCDHEC would continue with approval. Ms. Wilson mentioned one different thing about tank 12 was that SCDHEC was doing it in two parts. She explained there would be another chance for public review for tank 12. Mrs. Wilson said SCDHEC had the first closure module recently and would have another addendum to the closure module, which would be available for public comment in the fall. Mrs. Wilson explained the two part approach would be faster in the overall schedule. She then mentioned that the first closure module did not include the data for the full characterization of the residuals, or what would be left in the bottom of tank 12, so there was a little delay in getting that information. Mrs. Wilson said that final residual information would be in the addendum, which would be released in the fall. Mrs. Wilson said there was great progress occurring for high level waste; however, she said treatment had slowed down and the current treatment was at about half to one third of its capacity, which

she said SCDHEC felt was budget related. She explained the current forecast in DOE's plan showed a major delay in closure of future tanks and again that was related to the slowdown of current treatment and the SWPF delay. Ms. Wilson said SCDHEC was focusing on a refocus and reprioritization of DOE on treatment for the waste in the tanks so there was not a ten-year delay in closure of those tanks according to SCDHEC milestones.

CAB Vice Chair Nina Spinelli asked if Mrs. Wilson could provide all the contact information for the SCDHEC employees she introduced. Mrs. Wilson said she would send that information to the CAB Support Team.

CAB member Corbett asked Mrs. Wilson about the decision for SCDHEC not to push for a liner for the coal ash ponds at SRS, which was recently in the newspaper. Mrs. Wilson explained for SRS, SCDHEC looked specifically at the characteristics for D-Area. Mrs. Wilson said SCDHEC looked at all the technical factors, environmental and human risk, and in this case the final decision was that a bottom liner was not necessary because the engineered cap would be protective of the environment. CAB member Corbett asked how many monitoring wells were located around SRS to check for migration or leaking toxins. Mrs. Susan Fulmer, SCDHEC, said there were at least 20 monitoring wells around the ash basins and landfill; however, Mrs. Fulmer said there were many more located in D-area. Mrs. Fulmer said there was an extensive monitoring well network. CAB member Corbett asked if the results of the monitoring results were publically available. Ms. Fulmer said all the monitoring well data were placed in reports and available in the administrative record file, which was available for review. CAB member Corbett asked what SCDHEC would do if elevated levels of toxins started showing up in well monitoring data. Mrs. Fulmer said if SCDHEC became concerned with an increase, SCDHEC would meet with the EPA and DOE-SR counterparts to discuss an appropriate action; however, at this time SCDHEC had not seen anything, specifically from the inlet basins, that indicated additional contamination. Mrs. Fulmer said there was some contamination, but it was up gradient source where the coal runoff pile was located, which was up gradient of the basins and the landfill, but the landfill and ash basins did not seem to be contributing to the contamination of the groundwater at this point.

CAB member Hoel referenced Mrs. Wilson's comment that the high level liquid waste system at SRS was the single most environmental threat in SC. CAB member Hoel stated he was interested in the basis for Mrs. Wilson's statement and he asked if SCDHEC conducted a systematic and formal review of all the environmental threats in SC to arrive at her conclusion. Mrs. Wilson said her comment was based on the fact that SCDHEC did not have anywhere else in the SC that had that much volume that was toxic and radioactive in a liquid form. CAB member Hoel encouraged SCDHEC to conduct a more systematic analysis before coming to such a conclusion.

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

CAB member Earl Sheppard reviewed his presentation from the day before and announced the next WM Committee meeting was scheduled for August 4, 2015, at the New Ellenton Community Center in New Ellenton, SC. He said there were no presentations scheduled for the meeting.

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

CAB member Eleanor Hopson reviewed the presentation from the day before. She said the CAB Membership Campaign was over for the year; however, she said the CAB Support Team accepted applications throughout the year. She said copies of the newest Board Beat Magazine were available on the back table. She encouraged everyone access the CAB's Facebook page and website. She said there were no presentations scheduled for the committee.

#### Public Comments

Ms. Cee Cee Anderson, GAWAND, said she would like a list of all the CAB members to be made available for members of the public since it would be helpful for members of the public to reference which CAB members made comments. She also asked how to access information, other than online, about risk data and contaminants found so the public could data from SCDHEC, EPA, and DOE-SR.

Ms. Bernice Johnson Howard, GAWAND, introduced Ms. Che Long, the new GAWAND Program Manager, who replaced Amanda Hill-Attkisson. Ms. Johnson Howard provided an update on progress relating to CAB recommendation 317 stating GAWAND thanked the CAB for adopted recommendation 317 on March 17, 2014. She thanked DOE-SR and SREL for continued efforts related to GA monitoring. Ms. Johnson Howard said progress had been made in the GA monitoring program recommendation and with help from SREL some of the recommendations had been initiated. She discussed help Dr. Gene Rhodes, SREL, had recently provided to GAWAND. A copy of her statement will be attached to this document.

Ms. Rose Hayes, public, stated the CAB should stay focused on developing a new plan for holding meetings in other locations. She provided demographic data to support why she felt meetings should be held in other locations and she said she hoped the CAB would continue to discuss the imbalance.

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

CAB member Tom Barnes reviewed his presentation from the day before. He said further discussion and possibly voting on the draft recommendation would occur after the scheduled presentation. He then welcomed Ms. Cathy Lewis, Savannah River Nuclear Solutions (SRNS) to begin her presentation.

### Presentation: Innovative Environmental Remediation Technologies – Cathy Lewis, SRNS

Ms. Lewis said the purpose of her presentation was to fulfill a 2015 FD&SR Work Plan topic by providing an overview of the evolution of technologies and techniques used for environmental remediation at SRS. She said cleanup began in the early 1980's at SRS and in the early days used several traditional technologies pioneered by EPA. She explained as time passed, new technologies were developed at SRS to address specific problems. Ms. Lewis said existing technologies were adapted from other industries, primarily oil and gas, for environmental cleanup. She said beginning in the middle 1990's, SRS began intensively developing and executing new and innovative technologies for use in the environmental restoration (ER) program. Ms. Lewis said overall, more than 110 new characterization and remediation technologies have been deployed. She discussed M-Area, which was the first area at SRS where active remediation began. She provided a historical timeline for M-Area stating in the 1950's to 1988, industrial facilities were operational in the A/M Area to support the national defense mission. She discussed technologies deployed from 1954 to 2008. She provided a chart titled "M Area Volatile Organic Compound (VOC) Removal from 1984 to 2008" showing different technologies that were deployed compared to the amount of VOC's removed. She explained steaming was used in a process called dynamic underground stripping (DUS) as well as subsurface fracturing, which were two technologies borrowed from the oil industry. She discussed fracturing which involved injecting sand, water, and guar slurry into a formation, which would create a horizontal fracture to help better remove contamination from the ground. She showed pictures of fracturing efforts being performed by workers. She listed examples of remediation technologies developed, or modified at SRS, to meet site specific needs which included Soil Vapor Extraction by Solar Microblowers, Barometric Pumping, Edible Oil Injection, Phytoremediation, In-Situ Soil Mixing Subsurface Barrier, Silver Chloride Injection, and Bio-remediation using Micro-CED. She showed pictures of Soil Vapor Extraction with Solar Microblowers, which vacuumed VOC's out of the subsurface. She discussed Barometric Pumping stating when the subsurface pressure was higher than that at the ground surface, contaminants naturally moved upward through venting wells, but when the above ground pressure was greater, air was prevented from traveling down by a simple plastic sphere. She showed a picture of SRS showing where the Soil Vapor Extraction with Solar Microblowers and Barometric Pumping were used. Ms. Lewis described the Edible Oil Injection technology in T-Area that was used to sequester and biologically destroy VOC's. She said the Edible Oil Injection showed obvious results in less than six months and she showed images of T-Area before and after the use of Edible Oil Injection. She discussed Phytoremediation in E-Area explaining that tritium contaminated groundwater was intercepted before discharging to the streams and the water was used to irrigate pine forests. She described In-Situ Soil Mixing Barrier Wall, which was a barrier wall technique installed in F and H-Areas to locally control the flow of contaminated groundwater. She mentioned the deep soil mixing was used to mix an inert, low permeability grout into existing soils to form a series of low permeability barrier walls. She explained the wall redirected the flow of groundwater and the longer travel time allowed for increased radioactive decay and the slowed release rate reduces the concentration of tritium in nearby streams. She provided pictures of the In-Situ Soil Mixing Subsurface Barrier Wall before she discussed Iodine Capture with Silver Chloride. She mentioned SRNL invented the use of silver-bearing materials to capture radioactive Iodine-129 by injecting silver chloride along a groundwater flow path. She then showed pictures of the Silver Chloride before capture of Iodine and after the silver chloride capture of Iodine. Lastly, Ms. Lewis discussed Bio-remediation using Micro-CED in P-Area, which involved injecting some of the incubated indigenous bacteria into the ground to digest VOC's. Mrs. Lewis summarized her presentation by saying SRS continued to explore applications of new technologies by reaching remedial goals in a cost effective manner, quicker, with passive and green technologies.

CAB member Corbett asked on slide six how all the materials that were removed were disposed. Ms. Lewis said since the process involved the air stripper, the removed stuff went into the air. Ms. Lewis explained air stripping involved the water going into the column and the column was filled with packing-like material, and the water rushed down and was exposed to air turbulence. She said the TCE was actually removed out of the water into the air and was vented to the atmosphere where it was dispersed to further break down. CAB member Corbett asked if the other VOC's removed through different technologies were also pumped into the air. Ms. Lewis said that was correct. CAB member Corbett asked if the In-Situ Soil Mixing Subsurface Barrier Walls were built to hold back VOC's. Ms. Lewis explained the In-Situ Soil Mixing Subsurface Barrier Walls were dealing with tritium.

CAB member Snyder asked if there were any preliminary results of the Bio-remediation efforts in P-Area. Ms. Lewis said the results were inconclusive at that time since the technology had only been deployed for a few years.

CAB member Gillas asked what the half-life of Iodine 129 was. Ms. Lewis said it was very long.

CAB member Walters asked Ms. Lewis which of the technologies she discussed was the most problematic and the most successful. Ms. Lewis said she did not have a specific technology she felt was more problematic; however, she mentioned the shift from active to passive technologies has been very effective.

#### Voting: Draft Recommendation

#### Health Effect Reporting by the Savannah River Site

CAB member Barnes said a few changes were made to draft recommendation the day before, which were highlighted in yellow on the screen. CAB member Barnes asked if the CAB members had any other discussion on the draft recommendation. CAB member Hoel said he was questioning the purpose of item number one of the draft recommendation since it was not the Agency for Toxic Substances and Disease Registry's (ATSDR) role to perform continuous monitoring of SRS. CAB Vice Chair Spinelli said when she originally drafted the recommendation, she thought there was a statement at the end of the report that seemed like Center for Disease Control (CDC) would conduct yearly studies. CAB Vice Chair Spinelli said she contacted CDC and apparently they had an outreach group that came to SRS four times a year based on that report. CAB member Hoel asked if she was suggesting that DOE-SR continue outreach with ATSDR not monitoring. CAB Vice Chair Spinelli said she just used the wording within the report and she was fine taking out the part about the monitoring, but the way the report was worded made her think the work would continue. Mr. Mikolanis said his staff had been looking at the report ever since the draft recommendation was developed, but he said he was not prepared at that time to explain what ATSDR was doing or not doing. Mr. Mikolanis said he agreed with CAB member Hoel that DOE-SR did the monitoring, SCDHEC performed independent monitoring and sampling at SRS, but he said he was not aware of any ongoing and continuing monitoring being done by ATSDR. CAB Vice Chair Spinelli suggested changing "to monitor" in item number one to "effectively report." CAB member Hoel agreed with the change.

CAB member Walters asked CAB member Hoel how he knew so much about what ATSDR did and did not do. CAB member Hoel said ATSDR examined monitoring data that was available and there's a tremendous amount of data developed by DOE-SR, SCDHEC, and even GA in terms of monitoring the environment around SRS. CAB member Hoel said ATSDR examined that data in coming to the conclusions about the health effects of SRS, but he said ATSDR did not perform the monitoring.

CAB member Mary Weber suggested maybe the draft recommendation be tabled so it could be further discussed at the August 11, 2015, FD&SR Committee meeting. CAB member Barnes agreed. The CAB decided to table the draft recommendation.

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

CAB member Larry Powell reviewed his presentation from the day before. He stated the next NM Committee meeting was scheduled for August 4, 2015, at the New Ellenton Community Center. He then welcomed Mr. Allen Gunter, DOE-SR, to begin his presentation.

#### Presentation: K-Area Update – Allen Gunter, DOE-SR

Mr. Gunter said the purpose of his presentation was to provide information on K-Area and plutonium storage, which fulfilled a 2015 NM Committee Work Plan. He showed a copy of the CAB Waste and Material Flow Path diagram to illustrate K-Areas location at SRS. Mr. Gunter provided background information about plutonium (Pu) consolidation stating in 1998 the Department decided to consolidate non-pit Pu from various sites to SRS. He explained the decision was made to take non-pit Pu from Rocky Flats Environmental Technology Site (RFETS), Hanford site, Los Alamos National Laboratory (LANL), and Lawrence Livermore National Laboratory (LLNL) along with what was already at SRS. He said in 1998 the Department decided to convert the K Reactor to a plutonium storage facility. He stated in 2001 the Department approved the consolidation of only the RFETS Pu to SRS and in 2007 the Department approved the consolidation of the remaining non-pit Pu to SRS from Hanford, LANL, and LLNL. Mr. Gunter discussed Pu at SRS that was under safeguards stating SRS had approximately three metric tons (MT) of Pu under International Atomic Energy Agency (IAEA) safeguards. He said RFETS and Hanford each had approximately one MT of Pu under IAEA safeguards prior to consolidation, which was transferred to SRS and remained under IAEA safeguards. He also discussed how the Department placed one additional MT of Pu under the IAEA safeguards. He compared pictures of K-Area storage in the year 2000, which was empty, and storage today, which contained the configuration of "9975" shipping containers. Mr. Gunter explained K-Area storage configuration stating the Pu was stored within a "3013" container, which was then placed inside a "9975" shipping container that had two additional containment barriers. He said the "3013" container weighed approximately 30 pounds and the "9975" shipping container weighed approximately 400 pounds. He showed a computer generated image of a "9975" shipping container divided down the middle and he pointed out the different containment levels and showed how the "3013" container was securely stored inside. He commented that the generated image was the configuration of material in storage at SRS before he discussed how the Department initiated a project to expand the storage capacity of K-Area in 2010. He said the Department's decision to expand K Area capacity was made prior to any discussions concerning the Mixed Oxide Fuel Fabrication project future. Mr. Gunter stated Phase 1 was completed and became operational in June 2012 and Phase 2 was completed and became operational in December 2014. He

said the expansion added an additional 2,500 storage positions. He discussed the 3013 Surveillance Program, which ensured safe storage, stating the Surveillance and Monitoring program was approved in 2003 and was updated this past year. He discussed Non Destructive Examinations (NDE), which looked for pressurization. He said NDE's began in 2005, which was three years after packaging. He stated approximately 40 NDE's were performed each year; however, NDE's had been completed. He described the NDE process, which involved taking the "3013" out of the "9975" container and doing an x-ray to determine the pressure inside in order to validate if the container was leaking. Mr. Gunter then described Destructive Examinations (DE) which looked for corrosion, gas analysis, and material characteristics. He said DE's began in 2007, which was five years after packaging, and initially 15 DE's were performed each year; however, currently nine DE's were being performed annually in K-Area. He described the DE process stating since the "3013" had two welded containers, a hole was drilled in the "3013" and a sample was taken from between the outer can and inner can to determine if any inner cans were leaking; however, he said to date there had not been any leaking. He said the next step was to drill all the way through from the inner can to take a sample from the atmosphere next to the Pu. He said the top of the "3013" was then cut off and samples were taken of the oxide and the tops of the "3013," which were then sent to SRNL. He said workers then packaged the material and placed it back into storage. He said samples sent to SRNL were determining what was in the gas from the gas analysis sample, the actual density of the Pu, and any property change in the Pu. He then discussed the Shelf Life Program being conducted with LANL. He explained that for every kind of material stored in K-Area at SRS, LANL had the representative sample as well. He said DOE and LANL compare material and results with each other to validate whether similar conditions were occurring. He showed pictures of various functions within the 3013 Surveillance Program. Mr. Gunter explained when the 3013 Surveillance Program first began there were concerns about pressurization so the "3013" container was designed with a design pressure of 699 pounds per square inch (psi); however, he said to date, there had been no canisters over 20 psi. He mentioned there were no flammable gas mixtures; however, some corrosion had been seen on the convenience can, usually in the gas space or oxide can interface area. He said minimal corrosion was occurring in the inner can around the weld area. However, he said the Surveillance Program had not identified any condition that would challenge the 50 year storage life. Mr. Gunter said DE's continued to be performed in K-Area and the Shelf Life Program with LANL to validate storage life. He summarized his presentation stating Pu was safely stored in K-Area, SRS continued to evaluate storage conditions to ensure safe storage, and SRS had the experienced staff and facility to continue handling Pu.

CAB member Corbett asked what the design life was for the "9975" shipping container. Mr. Gunter said the "9975" was the shipping container that provided containment barrier, and it did not have a life, but it did have an O-ring, which he said DOE determined was good for at least 20 years. He stated DOE continued testing the O-Ring to make sure its life could be extended. CAB member Corbett asked if the "9975" was the type of container that would be used to ship materials to WIPP. Mr. Gunter replied "No." CAB member Corbett then asked why the "9975" was being called a shipping container. Mr. Gunter said the material from RFETS, Hanford, LANL, and LLNL were shipped to SRS in the "9975" container. CAB member Corbett asked if there was lead shielding in the "9975." Mr. Gunter referenced slide 10 of his presentation to point out the half-inch thick lead shielding that went all the way around the container. CAB member Corbett asked how long employees were trained before they were able to perform testing on the material. Mr. Gunter said it took approximately three years to hire, train, qualify, and clear workers in K-Area. CAB member Corbett asked what was causing the corrosion. Mr. Gunter said part of the material that came from RFETS, LANL, and Hanford contained salts in the material. CAB member Corbett asked what the final disposition was for the Pu in K-Area. Mr. Gunter said some of the material was slated for MOX and the other remaining material that did not meet MOX requirements would be down blended and sent to WIPP. CAB member Corbett asked if materials were sent to WIPP by train or truck. Mr. Gunter said they were sent by truck.

CAB member Walters asked Mr. Gunter to repeat the part of his presentation about the IAEA safeguards. Mr. Gunter said the United States government elected to show to the rest of the world that they put their Pu under IAEA safeguards for international counting of the material. He said the DOE put a portion of inventory under international safeguards. Mr. Gunter explained there really was not a difference in how IAEA accounted for the material and in fact, the instruments in K-Area used to measure the material with where what IAEA used when they visited SRS to measure the material. He explained IAEA evaluated new measurements against the previously values and if there was a difference, DOE had to reconcile. Mr. Gunter mentioned there were also cameras and radiofrequency temper indicating devices, which for the IAEA material, were live-streamed to Vienna. He said if anyone walked into the area where the Pu was held under IAEA safeguards, immediately the people in Vienna knew someone was in there. Mr. Gunter said if there was a break in the temper indicating device Vienna would contact us, which was why DOE-SR always contacted IAEA when entering that area so they were not surprised when the alarm sounded in Vienna. He explained IAEA visited SRS sometimes quarterly, sometimes semiannually; however, he said once a year IAEA would visit to actually pull "9975" drums from inventory to measure them. Mr. Gunter mentioned there really was not any difference in safeguards and accountability, but IAEA was an independent group that oversees the United States. CAB member Walters asked Mr. Gunter to define "down blending." Mr. Gunter said down blending was taking the Pu concentration down to less than 10 percent Pu.

CAB member Powell asked if was it difficult to separate the two once the material was down blended. Mr. Gunter explained that was the goal of the down blend process because DOE added additives in the inert material to initially make it difficult for someone to recover the Pu.



CAB member Hoel asked if any changes were made to the security at the K-Area in response to the incident that occurred when activists were able to get close to a uranium storage facility a few years ago at Oak Ridge. Mr. Gunter said DOE analyzed that incident and some changes were made; however, Mr. Gunter said he was unable to share details of those changes due to security reasons.

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

CAB member Bob Doerr reviewed his presentation from the day before. He said the next S&LM Committee meeting was scheduled for August 4, 2015, at the New Ellenton Community Center. He then moved to the discussion of the draft recommendation.

#### Voting: Draft Recommendation

#### Improve Public Participation

CAB member Doerr said the draft recommendation was discussed the previous day. He said there was significant discussion the day before about the draft recommendation; however, he said no changes were made. He then asked CAB Chair Simon to begin with the vote. CAB Chair Simon opened the floor for a vote and the CAB approved the recommendation with 21 votes, no opposition, and no abstentions. A copy of this recommendation will be attached to this document.

#### Public Comment

Ms. Karen Patterson, public, said several people asked her opinion of public participation relative to the CAB recommendation that was adopted that day. She said she had been involved in public participation through the National Environmental Policy Act (NEPA) process since the year 1991. In addition, she started working with the CAB in 1994 and was on the CAB for a total of 10 years. She explained that the CAB had always tried to encourage the public to attend CAB meetings; however, she commented that members of the public usually only participated in things they were passionate about. She said “very true” public attend CAB meetings; however, she said there was only a finite portion of the public that really cared about CAB issues.

CAB member Corbett spoke as a member of the public stating before she was a CAB member it was frustrating on the second day of a Full Board to wait for a public comment period to make comments about something she was interested in. She suggested having more opportunities for members of the public to comment on issues relevant to presentations, such as having public comment periods directly following presentations, instead of expecting the public to wait to comment about something in a presentation or about a topic they were passionate about.

Ms. Rose Hayes, public, reiterated what CAB member Corbett said. Ms. Hayes said if someone has a question she felt it would be much easier for someone to be able to ask the question following the speaker rather than waiting for the morning or afternoon public comment period.

After no further public comments, CAB Chair Simon thanked everyone for participating and adjourned the meeting.

~Meeting adjourned

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

## Position Paper for the Savannah River Site's Citizens Advisory Board on Using SRS for Interim Storage of Spent Nuclear Fuel

In 1945 the nuclear age began with the first manmade nuclear explosion at White Sands, New Mexico late in Second World War. By 1958 the technology had progressed from the bomb to power generation with the first commercial nuclear power plant opening in Shippingport, PA.

The Savannah River Site began operations in 1952 and has continued until today successfully pursuing various missions including heavy water production, plutonium/uranium separation, and the production of isotopes required for the space exploration program. Current missions include processing and storage of spent nuclear fuel, other nuclear materials, and nuclear wastes. Waste forms generated from these processes are bound for eventual disposal in a deep geologic repository. A new mission is underway to convert plutonium from nuclear weapons to fuel for commercial nuclear reactors in the Mixed Oxide (MOX) program. In 1981, an environmental remediation program was begun to clean-up the environmental contamination of the site created by earlier missions. The clean-up mission included safely decontaminating and decommissioning unneeded equipment and processing the contents in to a safe state for disposal in a repository.

By the 80's it was recognized that the safe disposal of nuclear wastes from both commercial and defense sources was a national priority. The Nuclear Waste Policy Act (NWPA) of 1982, created a timetable for the creation of a permanent underground repository. The permanent repository was slated to begin receiving commercial and defense wastes by the middle of the next decade. The responsibility to site, construct and operate the repository was given to the Department of Energy (DOE). A fee was imposed on nuclear power generators to support the creation and operation of the repository.

The NWPA called for DOE to make recommendations, by 1987, for two deep geologic repositories. In 1987 the act was revised to require DOE to consider only Yucca Mountain as the repository site. In 2002 President Bush designated Yucca Mountain as the repository site and, by 2004, all legal channels for overturning the decision had been exhausted. Work to license the site began.

In 2010 President Obama ordered work on the licensing process for Yucca Mountain to cease and all funding for licensing was withdrawn. No scientific or safety reasons were given.

President Obama created and tasked a Blue Ribbon Commission on America's Nuclear Future (BRC) to find alternatives to Yucca Mountain. The BRC issued its final report in 2012, including among its recommendations:

- a. The United States should proceed promptly to develop one or more consolidated storage facilities as part of an integrated, comprehensive plan for safely managing the back end of the nuclear fuel cycle. An effective integrated plan must also provide for the siting and development of one or more disposal facilities.
- b. Ensure that all near-term forms of storage meet high standards of safety and security for the multi-decade-long time periods that they are likely to be in use; active research should continue on issues such as degradation phenomena, vulnerability to sabotage and terrorism, full-scale ask testing, and other matters.
- c. The processes used to develop and implement all aspects of the spent fuel and waste management system should be science-based, consent-based, transparent, phased, and

adaptive. They should also include a properly designed and substantial incentive program

- d. The United States should undertake an integrated nuclear waste management program that leads to the timely development of one or more permanent deep geological facilities for the safe disposal of spent fuel and high-level nuclear waste

The nation now finds itself in a situation where the Blue Ribbon Committee is recommending that the nation promptly proceed to commence consolidated interim storage designed for multi-decade use. The program to develop a permanent, deep geologic disposal facility is only to be developed on a “timely” basis. The 2013 DOE response to the BRC recommendations, Strategy for the Management And Disposal of Used Nuclear Fuel and High-Level Radioactive Waste, states that over the next ten years the Administration currently plans to implement a program that “Makes demonstrable progress on the siting and characterization of repository sites to facilitate the availability of a geologic repository by 2048”.

The need to have a deep geologic repository was identified in the 1982 NWSA and the initial target date to begin accepting wastes was 1995. At the time president Obama took office (2009), the opening date for the repository had already been delayed until 2022. No progress on developing a repository has been made during the subsequent years, despite the Congressional Act requiring the development of a deep geologic repository much earlier. This delay of more than two decades is not unprecedented for projects managed by the Department of Energy.

The Salt Waste Processing facility currently under construction at SRS was approved in 2001 with an initial completion date of 2009. The completion date was moved from 2015 to 2018 and this date is in question. This delay is despite an enforceable agreement with the State of South Carolina that requires the facility to be completed by 2015. The Mixed Oxide Fabrication Facility was approved in 1999 with a completion date of 2007. Current projected completion date is 2018 and this date is questionable. In addition to being well behind schedule, these projects are billions of dollars over the original cost estimates.

There is no data supporting an assumption that a repository superior to Yucca Mountain will ever be identified. In addition, the \$13 billion dollars already spent to build the Yucca Mountain facility will be totally lost if a different site is selected. Considering the current national debt and budget deficit, it is unlikely that adequate funding will be available. Finally it is reasonable to assume, based on the DOE's track record, that there is no commitment to a date now 35 years in the future and even congressional mandates and enforceable agreements with the states will not force DOE to meet their commitments.

The Savannah River Site Citizens Advisory Board would like to make clear that:

- a. The CAB is not taking any position on commercial nuclear power generation.
- b. They are not concerned that the DOE would initiate a program that anticipated the unsafe storage of nuclear waste at SRS

The reasons for the CAB's opposition are:

1. The belief that no site for a long term geologic site superior to Yucca Mountain exists and any alternative site will be technically inferior.
2. The reopening of the repository selection process and, as a consequence, creation of interim storage sites will be a very costly endeavor in a time when the nation does not have the financial resources.
3. The completion of a new repository is generations away and there is no reason to believe the currently proposed 2048 availability date will be adhered to.

4. Future generations of South Carolinians and Georgians will not be well served by having the
5. Savannah River Site become an interim storage site for commercial nuclear waste, and for what will be an undetermined length of time.

The SRS CAB reminds DOE that SRS has never been tested for, studied for, or licensed for indefinite storage of spent nuclear fuel or high-level waste and encourages DOE to develop a plan for removal by 2048. The Savannah River Site Citizens Advisory Board wants the Department of Energy to know that it is opposed the use of SRS as a site for interim storage of spent nuclear fuel from commercial nuclear reactors.

Position Statement approved at July 2015 Full Board meeting. This paper will be up for renewal July 2016

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# Citizen's Advisory Board Statement

## Update Report on Recommendation 317

July 28, 2015

Bernice Johnson-Howard

The members of GA WAND, who stand before you today, are here to once again thank the Citizen's Advisory Board for implementing recommendation 317, on March 17, of 2014. We also thank The Department of Energy-Savannah River Site, and The Savannah River Ecology Laboratory for their continual efforts to address the issues that relate to monitoring in Georgia, which were specified in recommendation 317.

Although it has been over a year since the implementation of recommendation 317, we can report that there has been some progress made in the Georgia Monitoring Program Recommendations, provided to The Department of Energy- Savannah River Site, by The Savannah River Ecology Laboratory, and submitted on June 24, 2014.

GA WAND, and the Concerned Citizens of Shell Bluff, continue to seek knowledge, and gain understanding on how, if, and when the specific recommendations for improvements in the existing Georgia monitoring program; including the additional samplings, outlined in the report by The Savannah River Ecology Laboratory will take place.

With the help of Dr. Olin Rhodes, Professor and Director of the Savannah River Ecology Lab., we are happy to report that some of the recommendation out lined in the report to the Department of Energy at Savannah River Site, by the Savannah River Ecology Laboratory Have begun.

Under the "Communications recommendations", as outlined in the report, only one aspect of line item (1) has been initiated. That aspect is, (developing a strategy of communication with local community audiences for outreach and education).

Under "Communications recommendation", line item (2), some work has begun on one item, (namely, utilizing local community leaders to assist in the development of educational and outreach programs). The remaining line items under "communication recommendations", as well as the (nine) other addressed areas, and their suggestions in the Savannah River Ecology Laboratory remain un-address.

On April 11, 2015, Dr. Rhodes met with 20 people or, more who had assembled at The Bottsford Baptist Church in Waynesboro Ga. Even though there were issues getting into the

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CHe church, Dr. Rhodes remained calm and patient. Dr. Rhodes did not present himself as a man who was just completing an assignment, but rather as a man who was there to help address the Shell Bluff residents' concerns pertaining to their environment, and their health. Dr. Rhodes took the time to explain terms, testing, procedures, and other questions asked of him. In parting he offered to come back when we needed him...and we fully intend to take him up on his generous offer.

On July 16, 2015, Dr. Rhodes invited 5 GA WAND representatives to tour the Savannah River Ecology Lab. Once again Dr. Rhodes was more than generous with his, time, insight, knowledge, and understanding. He answered our questions (and we had a lot of them). Just as he did with the Shell Bluff Residents, Dr. Rhodes made himself available should we need him in the future. Dr. Rhodes we sincerely appreciate all the help you have rendered and we looked forward to friendship and co-partnering with you in the future.

We believe that through co-partnering with all the groups represented here in this room; that Shell Bluff/Burke County can become a safe place to live, work and prosper. We remain hopeful that the other proposed improvements to the Georgia monitoring program; as outlined by The Savannah River Ecology Laboratory, will manifest themselves in a "timely", manner. Timeliness is necessary, and will insure the health and safety concerns of Shell Bluff/Burke County residents being addressed in a more concrete way.

In the meantime, on behalf of GA WAND, and concerned members of Shell Bluff/Burke County Georgia, we offer a heartfelt thank you to the Citizen's Advisory Board committee, members of the Department of Energy-Savannah River Site, The Savannah River Ecology Laboratory, Dr. Rhodes, the CAB's, technical staff, and to all others who facilitate these important meetings.

Bernice Johnson-Howard

Recommendation 331  
Improve Public Participation

Background

According to the Standard Operating Procedures<sup>1</sup> of the Citizens Advisory Board (CAB), the CAB's purpose is to "provide independent advice and recommendations to the U. S. Department of Energy's (DOE) Assistant Secretary for Environmental Management (EM) or the Manager at the Savannah River Operations Office. The SRS CAB draws on diverse community viewpoints to provide its advice and recommendations, with a goal of directly involving stakeholders in EM planning and decision-making processes on the SRS cleanup." In order to fulfill this purpose, the CAB is to "provide for public involvement in the Board's advisory process by making information available to the public, holding open meetings, communicating efforts and results and creating opportunities for the public to participate in the process." In addition, the CAB will "serve as an interface with other boards and groups dealing with SRS issues to share information and avoid unwanted duplication of effort."

The membership of the board, listed under Article III, is "a broadly constituted organization consisting of a diverse group of people representing the interests and concerns of communities in South Carolina and Georgia affected by the Savannah River Site."

Given the scope of the CAB's charter and call for geographic and demographic diversity, CAB board and committee meetings should be hosted in locations that maximize opportunities for public participation. The areas affected by the Savannah River Site include several counties on both sides of the Savannah River, including: Aiken, Barnwell, Allendale, Hampton, Jasper and Beaufort counties in South Carolina, and Richmond, Columbia, Burke, Screven, Effingham, and Chatham counties in Georgia.

In the recent past, the SRS CAB regularly met in Hilton Head, SC, Columbia, SC and Augusta, GA annually. In 2014, all committee meetings for the SRS CAB were held only in Aiken County, SC. The full-board meetings were also held only in Aiken County, SC, except one meeting downstream in Beaufort, SC. In 2015, it is projected that all meetings will also be held in Aiken County, South Carolina, except for one meeting in Savannah, Georgia.

Recommendations

The SRS Citizens Advisory Board recommends that the Department of Energy:

1. Hold SRS CAB meetings in a more geographically diverse manner to allow counties affected by SRS to host more regional meetings and enable the greatest public participation. Reinstate SRS CAB meetings in Hilton Head, SC, Columbia,

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<sup>1</sup> Savannah River Site Citizens Advisory Board Standard Operating Procedures, updated November 2013.  
<http://cab.srs.gov/library/sop.pdf>

SC and Augusta, GA on a frequent basis to enhance the public's opportunity to actively participate and share their concerns with the CAB.

2. Maximize efforts to attract public participation in CAB meetings. This should include updated electronic/social media information, newspaper information, and enhancing ways to advertise CAB meetings through city and county council notifications. Opportunities for public participation via telephone and the internet should be enhanced.
3. Restore funding to improve advertising of full-board and committee meetings to broadly notify the public. Advertising, at minimum, should include newspaper(s) in the host city of the meeting.
4. Enable CAB representation when planning SRS local public education and outreach events, such as Information Pods, Environmental Justice meetings, public tours of SRS, Earth Day exhibits, etc.