

Meeting Minutes  
Savannah River Site (SRS) Citizens Advisory Board (CAB) – Full Board Meeting  
Applied Research Center, Aiken, SC  
July 24, 2017

Attendance – Monday, July 24, 2017

CAB

Gil Allensworth  
Susan Corbett  
Bob Doerr  
Thomas French  
Dawn Gillas  
David Hoel  
Eleanor Hopson  
Douglas Howard  
Daniel Kaminski  
Jim Lyon  
Narinder Malik  
John McMichael  
Cathy Patterson  
Larry Powell  
Bill Rhoten  
Earl Sheppard  
Robert Smith  
Nina Spinelli  
Ed Sturcken  
Joyce Underwood  
David Vovakes  
Mary Weber  
Bobbie Williams

DOE/Contractors

Zach Todd, DOE-SR  
Avery Hammett, DOE-SR  
Jean Ridley, DOE-SR  
Thomas Johnson, DOE-SR  
Maxcine Maxted, DOE-SR  
Kristen Huber, SRNS  
David Little, SRNS  
Jimmy Winkler, SRNS  
Lindsey MonBarren, SRNS  
Stephanie Shuford, SRNS  
Megan Winzeler, SREL  
James Tanner, S&K  
Chelsea Gitzen, S&K  
Federica Staton, S&K

Agency Liaisons

Trey Hiott, SCDHEC  
Sandra Snyder, SCDHEC  
Ron Jumper, SCDHEC  
Rob Pope, EPA

Stakeholders

Jarrett Rice, Bechtel  
Gina Joiner, CH2M  
Ken Gray, S&K  
Steve Hueffner, Hueffner  
Consulting  
Chuck Messick  
Tomoaki Kishimoto, TEPCO  
Janie Scott, GA WAND  
Colin Jones, AECOM  
Logan Campbell, WGS  
Shannon Farrel, WGS  
Joe Ortaldo  
Natalie Herrington, GA  
WAND  
Stacie Landrum, Aiken  
Standard  
Ed Wannemacher, BWXT  
Laura Lance, Sierra Club

Opening: Earl Sheppard, CAB Vice Chair

Mr. Sheppard welcomed everyone to the meeting.

Meeting Rules & Agenda Review: James Tanner, CAB Facilitator

Mr. Tanner reviewed the meeting rules and the agenda for the day.

CAB Chair Update: Nina Spinelli, CAB Chair

Ms. Spinelli noted monitoring had begun in the Georgia community of Shell Bluff which is important because this pertains to a recommendation created by the CAB during 2016. She also noted this recommendation was created largely in part due to public input at CAB meetings. She continued by noting 22 cents of every dollar of the \$6.5 billion requested by the Department of Energy Environmental Management is earmarked for Savannah River Site. Maintenance and repair at SRS is estimated at \$155.5 million and Liquid Waste Management expenditures make up the largest part of EM's 2018 budget request.

Ms. Spinelli drew attention to the fact that this full board meeting was the first test of the new agenda format, and asked for feedback from all CAB members as well as the public in regards to this change while it is being tested.

Agency Updates

Jack Craig, Site Manager, Department of Energy – Savannah River (DOE-SR)

Mr. Craig summarized fundraising campaigns on site, outreach efforts, outlined EM goals, summarized an annual exercise for an active shooter event, current budget status for FY 17 & 18, solid & liquid waste project updates, coordination with local military organizations and future construction projects. He also provided an update on assessments being done in aging SRS facilities as discussed at previous CAB meetings. This includes a potential inadequacy in a recent safety analysis of an H-Canyon exhaust duct. Core samples from the concrete wall from ongoing assessments indicate a structural integrity potential

degradation of the concrete to a greater depth than currently analyzed. As a result immediate measures were taken to restrict any additional receipts of nuclear materials into H-Canyon or HB Line with specific operational controls. He continued with updates on the various community outreach programs as well as WIPP shipments and DWPF melter change-out. He then continued with updates on cleanup and other construction or change-out projects. He also gave an informal update regarding a fire on site in an unoccupied area of the site inside of a vehicle. The second informal update was regarding the FY 18 budget – the House energy and water marks for the budget were \$50 million less than SRS' request so they're trying to figure out the disconnect there.

#### Q&A Session

Bob Doerr, CAB member, asked if Congress plans to make cuts to the SRS budget. Mr. Craig noted that for the FY 17 budget SRS received \$80 million less than requested. For FY 18 the request was almost identical and the House and Senate have come up with two different versions – one with a \$20 million cut to the proposed budget and the other with an \$18 million cut. Mr. Doerr asked how the other sites are faring – with an increase or decrease. Mr. Craig noted that some are getting more, some less, some are staying the same.

David Hoel, CAB member, asked if there were any environmental violations since the previous full board meeting to which Mr. Craig responded there had not been. Mr. Hoel asked if there had been any noncompliance to which Mr. Craig responded there had been one which was a project in F Area while removing material from around a duct which was found to contain asbestos which was reported to the state and still is under review. Mr. Hoel asked for any DOE order violations since the previous CAB full board meeting, to which Mr. Craig responded that there had been none he's aware of. Mr. Hoel asked for a comment on the status of the negotiations with DHEC and EPA regarding the future of the liquid waste tank closure milestones. Mr. Craig responded that those FFA milestones are still under negotiations. Mr. Hoel then asked about DWPF experiencing numerous violations causing it to go into "deliberate operations." Mr. Craig responded that there had been an event where contaminated oil was being removed from the site which was an integration which involved SRR and SRNS and wasn't appropriately handled. This was during an outage period. Mr. Hoel asked if there were other issues, and Mr. Craig replied that it was the final issue but previous ones had to do with procedure compliance.

Dawn Gillas, CAB member, asked about the \$80 million reduced from the budget for FY 17 and if that was planned for. Mr. Craig responded that SRS had been operating on the lower amount of FY 16 levels to be conservative to be able to get the site through the year. The cut was not from the continued resolution budget.

Susan Corbett, CAB member, asked if the TREAT workshop is video taped so they could be watched later. Mr. Craig responded he did not know but would find out and provide info shared there.

Daniel Kaminski, CAB member, asked if there are any planned projects for local military memberships to work on at SRS in partnership as years prior. Mr. Craig replied that there were no projects planned currently but other types of collaborations are planned.

Bob Smith, CAB member, asked about a shipment from WIPP which was improperly packaged and safety issues with regards to WIPP in recent years – if anything was being done to resolve those. Mr. Craig responded that there had been a recent shipment from Los Alamos which were samples for SRNL to analyze. They had been shipped by air to the airport and then delivered to the site when they usually arrive in a different method. SRS is currently holding it pending their review process.

Bobbie Williams, CAB member, asked about the new EOC on site. Mr. Craig said it's still in the planning phases, but currently an alternative analysis is being conducted.

Joyce Underwood, CAB member, asked if the FY 18 budget submission included what the previous year's budget was used for. Mr. Craig replied that the submission included in depth what the funds would be used for.

Larry Powell, CAB member, asked whose airplane transported the Los Alamos sample and where it took off from as well as landed. Mr. Craig replied that he did not have that information but it would be provided for the CAB.

#### Rob Pope, Environmental Protection Agency – Region IV (EPA)

Mr. Pope summarized the EPA budget status for FY 18. He noted that the EPA is pleased with the progress in D Area. He also summarized the history and status of milestone agreements with SRS and DHEC. He then praised DOE-SR for working well with the EPA on implementing early actions with contaminated groundwater on site.

#### Q&A Session

Ms. Corbett asked what the groundwater Mr. Pope mentioned was contaminated with. He responded that one of the contaminants is trichloroethylene. Ms. Corbett asked which 2 milestones would be missed which he had mentioned in his update. Mr. Pope noted that those had not been resolved yet and were still being discussed – bulk waste removal milestones.

Ms. Gillas asked if there had been any reductions at the EPA because of the current presidential administration. Mr. Pope noted he had not seen any difference at his level but there is a goal to reduce staff numbers which was also a goal under the previous administration. He noted there's a buy-out offer for retirement to help reduce staff numbers as he mentioned. A reduction in force had not been enacted.

Narinder Malik, CAB member, asked if the EPA had been monitoring the concentration of contaminants in the groundwater aforementioned. Mr. Pope responded with a yes and explained that process in detail.

Beth Cameron, South Carolina Department of Health and Environmental Control (SCDHEC) Ms. Cameron noted FFA Appendix E and D revisions approval by SCDHEC. She also summarized discussions with DOE-SR with regards to milestones. She went on to note that SCDHEC participated in the TREAT workshop aforementioned.

#### Q&A Session

Mr. Hoel asked if there are any active enforcement actions with regards to SRS. Ms. Cameron answered that there were none to the best of her knowledge.

#### Administrative & Outreach Committee Update: Eleanor Hopson, Chair

Ms. Hopson asked CAB members to sign up for outreach opportunities coming up in the next few months. She also noted that a membership drive is currently underway to fill open positions.

#### Facilities Disposition and Site Remediation Committee Update: Dawn Gillas, Chair

Ms. Gillas read a list of committee members and the committee purpose. She then announced the open recommendation and moved the discussion to the next committee meeting. She also then announced the next committee meeting in August.

#### Nuclear Materials Committee Update: Larry Powell, Chair

Mr. Powell read a list of committee members and the committee purpose. He then announced there are no open recommendations and when and where the next committee meeting would be held in August. He noted a heavy public involvement at the June committee meeting.

#### Strategic and Legacy Management Committee Update: Dawn Gillas, Chair

Mr. Doerr read a list of committee members and announced the two open recommendations. He announced that the responses to these recommendations from DOE-SR would be reviewed at the next committee meeting in August. He reviewed discussions from the previous committee meeting in June. He announced the next committee meeting time and place in August.

#### Waste Management Committee Update: Gil Allensworth, Chair

Mr. Allensworth welcomed everyone to the meeting and read a list of committee members. He welcomed Joyce Underwood to the committee. He then read the committee purpose. He then announced there was no open recommendations and summarized the previous committee meeting in June. He also announced the next committee meeting time/place in August.

#### Discussion of Draft Recommendation: "Drone Spotting Over SRS"

Nina Spinelli, CAB Chair, explained that the draft recommendation had been discussed at committee meetings twice previously. She then read the recommendation section of the draft recommendation.

Mr. Hoel noted that the recommendation included "8 drones had been spotted flying over SRS" when it could have possibly been the same drone. Also according to a previous presentation from DOE-SR OEA, there had been 4 other sightings. All sightings were unconfirmed. Ms. Spinelli agreed to change the wording. Mr. Kaminski noted some grammatical errors to change. He then suggested adding the phrasing to request updates on airspace use over SRS. Mr. Tanner suggested against adding that to recommendations because it should be added to the work plan instead. Mr. Doerr questioned including "unconfirmed spottings" which Mr. Hoel agreed and Ms. Spinelli agreed as well so the change was made. Mary Weber, CAB member, asked what the fourth recommendation's purpose is and who would be doing the testing mentioned. Ms. Spinelli noted this would piggyback on SRS' military partnerships. Mr. Hoel noted it was not mentioned in the background and in the previous committee meeting it was discussed as removing that recommendation. Ms. Spinelli agreed and called for an informal vote. The majority decided to remove it so that is what was done. A separate recommendation was planned for that recommendation. Jim Lyon, CAB member, stated his opinions and experience regarding hindering drones and where they may go in the future. He noted the future capabilities of drones should be included in the recommendation. Ms. Williams noted a grammatical error which was changed. Ms. Underwood asked if there was any government regulations regarding drones. Ms. Spinelli noted that was included in the background section of the recommendation and summarized those details. Mr. Doerr

noted the response from DOE-SR would likely mention how drones are managed or regulated. Mr. Lyon noted the drone problem lies with Homeland Security so the recommendation should include that. Ms. Spinelli thanked him for his input.

#### Discussion of Draft Recommendation: "Curation Facility"

Ms. Spinelli gave a brief background on this recommendation and asked for typos. She then read the recommendation section. Mr. Malik noted this should be easily accessible to the public and outside of the site. Ms. Spinelli noted that language is included in the recommendation but it might not be feasible to move the curation facility so it was left open ended. Mr. Doerr noted he agreed with the recommendation. David Vovakes, CAB member, noted a misspelled word which was corrected.

#### Discussion of Draft Recommendation: "H-Canyon"

Ms. Spinelli gave a brief background on this recommendation and read the recommendation section. Ms. Corbett asked for clarification regarding the SNF mentioned in this recommendation. Ms. Gillas noted it could be changed for aluminum-based SNF because that's all H-Canyon was set up to do. She then suggested to change the wording in the second recommendation to "all SNF managed by SRS." Mr. Kaminski noted removing the word "other" in the first paragraph and another grammatical change – both were accepted. Mr. Hoel asked to include "remaining inventory" on the same recommendation that Ms. Gillas mentioned. Ms. Gillas noted this would not include any incoming SNF. Ms. Weber noted she's not comfortable with the second recommendation "while the community surrounding the site believes that the site can safely store fuel." She went on to explain that it makes her uncomfortable to speak on people's behalf that way. Ms. Spinelli noted this came from multiple public comments at previous meetings. Mr. Tanner asked how it could be changed to make Ms. Weber comfortable with it. She noted she would think about it. Ms. Corbett suggested removing it altogether. Ms. Spinelli suggested changing community to SRS CAB, which was accepted. Ms. Corbett noted it doesn't bolster the discussion and there is a question of how long fuel can be stored safely. Ms. Gillas noted she felt it's important to note it shouldn't be at SRS forever but it's probably ok now. Ms. Spinelli suggested adding the word temporarily, which Ms. Gillas noted was relative – but suggested "currently safely stored." Mr. Tanner suggested removing the word "currently." Mr. Allensworth noted that a detailed conversation on every word and gutting this recommendation or any others is not necessary, and members can vote for or against it without having to re-write it. Mr. Powell noted that making those edits helps everyone vote to pass it. He also noted that if things are inserted which aren't necessary such as SRS being a storage facility it implies the CAB is satisfied with that. Mr. Hoel noted he agreed with Mr. Powell and the sentence being debated was not vital to the recommendation. Ms. Spinelli agreed and that sentence removal was accepted. Ms. Williams noted two misspellings and a punctuation error which were accepted. Ms. Gillas noted grammatical errors which were accepted. She also asked that dry storage be removed as a disposition path. This was accepted.

#### Discussion of Draft Recommendation:

##### "Oppose Consolidated Interim Storage of SNF & HLW at SRS"

Mr. Doerr asked for a percentage of the responses received from the public regarding this recommendation. Mr. Tanner responded that it was an overwhelming majority in support of this recommendation. Mr. Hoel gave a summary of the background and history for this draft recommendation. He then read the draft recommendation entirely and noted recent changes which were suggested by Mr. Lyon. Those were accepted and the changes were made. Mr. Allensworth noted that what was included in the recommendation seemed to target DOE-SR and their failures. He noted multiple incorrect references to DOE. He also noted there are educated guesses being made and not including exact info. He asked where SNF could go other than SRS. Mr. Hoel answered that he did not know, but SRS is the least likely. Mr. Allensworth asked if SRS is the safest location for SNF to go. Mr. Hoel responded no. Mr. Allensworth asked where the best location instead would be. Mr. Hoel responded that he did not know. Mr. Allensworth asked if any other site had the manpower or expertise to handle the SNF which SRS currently handles. Mr. Hoel responded that DOE had "tons" of sites and commercial facilities to handle the same SNF. Mr. Allensworth then asked if this is a "not in my backyard" conversation, implying that no solution was being presented, but the issue would be shuffled to some other location where the same concerns would arise. Mr. Hoel disagreed and noted the recommendation was coming from the scientific values of being an Eastern site with a "lot" of surrounding population and lots of precipitation. He summarized that it is "a dumb place to store SNF." Tom French, CAB member, noted he had issues with the recommendation because the DWPF canisters were noted and they are completely contained and the decision had already been made for interim waste storage by DOE who has invested in two very large buildings including double-stacking in one of those buildings. He continued by saying there is no other place for this SNF in question to go which would be safe and no money to invest in new infrastructure. These canisters are not subject to erosion or washing into rivers as it is implied in the recommendations as he noted further. He asked that the mention of these canisters be removed. Mr. Hoel noted that these facilities were not designed to hold HLW until a repository was built, instead they were designed to hold it for a temporary time so a repository would be established soon and not 50 years from now. He continued that SRS is not the right place for this SNF even in its solidified state. Mr. French noted that the design life is close to 30 years. Mr. Hoel noted this was not 50 years. Mr. French noted his point was that there are no alternative infrastructures nor does any money to do so exist in the budget. Mr. Hoel did not agree with this suggested change. Mr. Powell asked from "EM" to be left in recommendation one. Mr. Hoel explained the reasoning behind leaving this in that recommendation to specifically note the SNF in the CAB's purview. Ms. Gillas asked what the design life of the DWPF storage canisters are. Jean Ridley, DOE-SR, answered that it was around 30-40 years. Ms. Gillas noted she did not agree with the recommendation and she felt it's very close-minded. Mr. Hoel noted that the public largely expressed their support for this recommendation and the following on the agenda and encouraged CAB members to read it. Ms. Underwood suggested grammatical error changes. These were suggested. She asked for clarification

regarding worry that canisters would degrade and cause SNF to leak into groundwater and streams. Mr. Hoel clarified by answering yes, that was the gist. Ms. Underwood then asked if the canisters could be re-packaged to reset the clock so to speak on their degradation and Mr. Hoel answered no. Mr. Malik noted that if the waste could be classified as TRU it could go to WIPP. Mr. Doerr agreed with Mr. Allensworth that the recommendation poses no real solution, he also agreed SRS' SNF storage should be temporary. Mr. Lyon noted that regardless of where the repository goes there will only be one, and the SNF can't be moved if there's nowhere for it to go. Ms. Weber thanked Mr. Tanner for sending along the public emails in support of this recommendation and reminded CAB members to consider these opinions when making a vote for or against this recommendation. She also agreed for changing harsh verbiage speaking out against DOE-SR so the point of the recommendation would be better received. Ms. Corbett thanked Mr. Hoel for expressing the sentiment of the state of SC. She noted there are two different topics – Yucca Mountain and commercial spent fuel. She also noted the NRC continues to decrease their strict standards for canisters. She suggested canisters being kept where it originates and monitored until Yucca Mountain or a repository is being established. She also noted House Bill 3053 creates a series of "interim dumps" which decouples interim storage plans from a repository allowing interim storage to be permanent. Mr. Tanner asked if there's a change which could be made in order for the CAB to vote to pass this recommendation. Mr. Allensworth noted the community was not totally represented in all of the public feedback received. "We cannot pick and choose when we want to represent the community and when we don't want to represent the community," said Mr. Allensworth. Mr. Doerr motioned to move the recommendation for a vote the following day of the full board meeting.

#### Discussion of Draft Recommendation:

##### "Oppose Receipt of German SNF for Treatment & Storage in the US"

Mr. Hoel gave a summary of this draft recommendation and read it in its entirety. Mr. Malik expressed concerns regarding regulations on receiving SNF from Germany and seconded the discontinuation for findings on the German fuel. Ms. Weber asked if the CAB was advising through this recommendation the selection of the no action alternative that the CAB would ask for the deficiencies would be corrected in the EA since that would further delay a decision. Mr. Hoel noted the no action alternative is stated by DOE typically in their final environmental assessment which was not stated in the draft. He noted DOE should state their preference in the final EA. Ms. Weber agreed. Mr. Allensworth noted in the background the fuel in question is US-origin fuel. Mr. Hoel confirmed. Mr. Allensworth then read from President Eisenhower's "Atoms for Peace" speech from December 8<sup>th</sup>, 1953 which is the origin for loaning nuclear materials to other countries and then committing to receiving it when they no longer had a use for it. He noted the treaty created from this speech was extended and adopted by other countries in the coming years. He also went on to point out that this recommendation would then take that commitment and break it. The memo noted in this recommendation is 3 years old and no longer correct – this German SNF does in fact come with a non-proliferation risk which the memo denies. He then cited recent events where a terrorist was found with plans to include the secure facility where these SNF are kept, emphasizing the need for the US to uphold their promise to keep these materials safe. He also expressed his disagreement with the recommendation asking for SRNL to discontinue research.

This discussion was then suspended so a public comment period could be held.

#### Public Comment

Joe Ortalda announced the heritage foundation hours of operation and plans to try to coincide future hours with CAB meetings. He expressed his support of the draft recommendation previously discussed. He suggested requesting information from DOE as to whether or not the German SNF is a non-proliferation risk. He went on to note his experience based on his involvement with DWPF and the canisters there.

The project coordinator who did not name herself spoke about the Green Mop project which is set to garnish public input regarding the Shell Bluff community in Burke County.

Chuck Messick noted his experience prior to retiring as a DOE-SR employee. He also suggested tabling this recommendation until receiving more information regarding the German SNF non-proliferation risk.

Tom Clements noted he made an article available from SRS watch which is his organization. He summarized this document. He then asked Ms. Spinelli if she had received any new information from DOE regarding drone sightings. She replied that she had not. Mr. Clements also noted the status on his various FOIA requests made to DOE-SR, and provided a list to anyone interested. He concluded by expressing his opinions in support of the SNF-related draft recommendations.

Pamela Greenlaw thanked the CAB for the opportunity to speak and noted her affiliation with the Sierra Club. She noted the public's concern with the storage of domestic utility waste. She also expressed the Sierra Club's support of the two recommendations opposing German SNF and interim storage.

Laura Lance asked if interim storage locations were consent-based, then asked if communities had provided input on SRS interim storage. She then claimed public opinion on this topic had been discredited at this CAB meeting. She also noted that the public didn't need to be educated on nuclear materials to be able to form an opinion on how it's handled. She also expressed support for both draft recommendations opposing SNF storage.

This concluded the public comment.

#### Discussion of Draft Recommendation:

##### “Oppose Receipt of German SNF for Treatment & Storage in the US” - Continued

Ms. Gillas noted that there is no question this recommendation shouldn't be considered after the facts Mr. Allensworth noted earlier. She asked for specification in delays caused by under funding in treatment of liquid waste. She noted it had been equipment failure issues and not under funding issues. Mr. Hoel noted SRS continually experienced funding at a level lower than they had asked for. Ms. Gillas asked DOE if it was funding shortages or technical issues. Mr. Craig responded that both attributed to the problem. Ms. Gillas noted that because CAB members aren't elected by the public, they could not speak on their behalf as previously was determined so that should result in a change. She asked for the status on the funding from Germany to process their SNF. Maxcine Maxted, DOE-SR, replied that Germany had paid for all completed research which stopped last year. When the funding stopped so did the research. Ms. Gillas asked if they had reached a decision on what to do with the SNF. Ms. Maxted responded that they're awaiting a decision from NEPA. Ms. Underwood noted some grammatical changes which were accepted. She then asked if Germany would fund storage of this SNF at SRS. Ms. Maxted noted they would pay for all of the processing costs through the life cycle of this material. Ms. Underwood asked if that would lead to the creation of jobs. Ms. Maxted replied yes, less than 50. Mr. Kaminski agreed with the public opinions regarding this recommendation. He suggested adding the opposition of receiving this fuel if not funded by Germany. Mr. Hoel noted the recommendation number three was not regarding cost, but creating a risk if a method for processing this fuel once created by DOE-SR was to get into the wrong hands. Mr. Kaminski noted that in his experience the German public did not want their government to pay to ship this material to the US for processing and instead store it there. Ms. Spinelli called for a motion to send this draft recommendation back to the August committee meeting. It was seconded. The majority voted in favor of this.

Ms. Spinelli asked that all CAB members who come to committee meetings to read emails sent by support staff prior to attending – this includes draft recommendations. She also noted that the bulk of work on recommendations should be done at committee meetings.

END OF DAY 1, May 22, 2017

Meeting Minutes  
Savannah River Site (SRS) Citizens Advisory Board (CAB) – Full Board Meeting  
Hilton Garden Inn, Augusta, GA  
July 25, 2017

Attendance – Tuesday, July 25, 2017

CAB

Gil Allensworth  
Susan Corbett  
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DOE/Contractors

Jack Craig, DOE-SR  
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Maxcine Maxted, DOE-SR  
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Ben Jumper, SCDHEC  
Sandra Snyder, SCDHEC

Stakeholders

Jeff Leita, AECOM  
Colin Jones, AECOM  
Steve Hoeffner, Hoeffner Consulting  
Chuck Messick  
Tom Clements, SRS Watch  
Jarrett Rice, Bechtel  
Gina Joiner, CH2M  
Tomoaki Kishimoto, TEPCO  
Janie Scott, GA WAND  
Lindsay Harper, GA WAND  
Annie Laura Howard  
Stephens, GA WAND  
Shannon Farrell, WGS  
Logan Campbell, WGS  
Rick McLeod, SRSCRO  
Donald Bridges, CNTA  
Elester Patten, BWXT  
Liz Goodson

CAB Chair Opening and Update – Nina Spinelli, CAB

CAB Chair Nina Spinelli opened the meeting and announced the REMOP upcoming meetings which were mentioned previously.

Presentation: Plutonium Program Overview/Update – Allen Gunter, DOE-SR

Mr. Gunter explained his position and that he would provide an update on K Area and downblending plutonium. He explained the history of a DOE standard for long-term plutonium storage and current requirements. He also explained where the plutonium comes from – other countries and DOE sites. Surveillance is also performed on these stored materials, and there is material ready for MOX processing. K Reactor was transformed into the storage facility it is today. He noted it's basically a warehouse. He displayed images of the storage containers and explained the requirements they have to meet. Next he went into detail with regards to the surveillance program and why it needs to be surveilled, also what they're looking for during that process including specific requirements such as pressure and erosion. He also explained what equipment is used for that surveillance program. He then noted SRNL's involvement in the surveillance and evaluation process. He went into detail about the origin of non-MOX-able materials owned by EM. This material came to SRS for storage and was previously incorporated into glass and then stored which is the most expensive disposition path. Through experimentation they devised a method of downblending in 2012 and did so for about 61 kg. Due to budget restrictions this process was shut down. The authority and approval was given in 2016 for downblending. Downblending began in 2017. He provided pictures of this process and the equipment used for it. He noted SRS can safely store these materials currently and in the future and detailed the staffing hours in general.

Q&A Session

Mr. Kaminski asked what the disposition path is after destructive testing for canisters. Mr. Gunter replied that the canisters are TRU waste, and the plutonium is downblended. Mr. Kaminski asked if destructive testing and downblending are done at the

same time. Mr. Gunter replied that destructive testing is done first during the first few months of the fiscal year while the humidity is low so the humidity inside the canister can be determined. Downblending is done after that.

Mr. Vovakes asked if the plutonium and uranium stored in K Area are stored separately. Mr. Gunter noted some are mixed and that's how it came to SRS.

Mr. Hoel asked what the plutonium is blending with during the downblending process. Mr. Gunter replied that he cannot give that information out for safety reasons but it is an inert material. Mr. Hoel asked how many of the shipments made to WIPP which contained downblended materials. Mr. Gunter replied 7 out of the 8 shipments contained the downblended material. Mr. Hoel then asked if there are any scheduled for FY 18 and Mr. Gunter noted they are working with WIPP on that, and it depends on the courts. Mr. Hoel asked for clarification. Mr. Craig noted SRS are in negotiations with WIPP on FY 18 shipments. Mr. Gunter noted that SC has a lawsuit with DOE-SR to remove 1 metric ton of plutonium.

Mr. Malik asked regarding gas that escapes regularly as noted by the surveillance process and if it is collected. Mr. Gunter replied prior to drilling the cans, they are placed into a vacuum chamber and a sample is taken and placed in a vile for testing by SRNL. Mr. Malik then asked about the grinders also used in the surveillance process and if dust from that is collected. Mr. Gunter noted this process is done through a protected "glove box" which is filtered and ventilated and getting the granules and larger chunks is the goal. He went on to note that this box is cleaned after every process so there is no buildup. Mr. Malik then asked if the canisters can be classified as TRU and sent to WIPP. Mr. Gunter noted that the evaluation process for doing just that yielded issues – shipped as is would be a high security shipment, and WIPP does not have the money to upgrade their facility to keep this secured. Also he noted due to the collapse history that could create a criticality.

Bill Rhoten, CAB member, asked if the plutonium can be recovered. Mr. Gunter responded that anything can be recovered with current capability with the appropriate level of funding and equipment. The goal is to make it difficult.

Ms. Corbett asked what isotope is being discussed. Mr. Gunter replied it is 239.

Doug Howard, CAB member, asked what determines the shipments going by rail or truck. Mr. Gunter responded that it depended on the material but most coming to SRS arrives by truck. Foreign materials often come by rail.

Ms. Gillas asked how many shipments it would take to get all 5 tons authorized to WIPP. Mr. Gunter replied 1700 shipping containers per year and 42 go in a single shipment. Ms. Gillas noted this is 38 shipments per year. Mr. Gunter noted that WIPP is not currently running at full capacity. WIPP estimates they will be able to receive the projected shipments needed from SRS in the future. Ms. Gillas then asked for an answer in years. Mr. Gunter replied they estimate that will be done by 2030.

Ms. Underwood asked if the program would be delayed if the Congressional budget. Mr. Gunter noted the facility is staffed already and if there's a significant cut that would be an issue but it's currently not the case.

Presentation: SWPF Status and Liquid Waste Integration – Pam Marks, DOE-SR & Keith Harp, SRR  
Ms. Marks began her presentation by providing a history on SWPF and future plans for operations. She continued with building statistics and displayed a graphic of the building. Next she proceeded to display and explain a chart with SWPF project milestones, with a target facility operation of December of 2018 following testing and commissioning. Currently she noted that date may be pushed up to October of 2018. Construction of SWPF was completed on April 22, 2016 which was 8 months ahead of schedule and cost \$60 million less than the target of \$530 million. The current workforce is down from over 800 during construction to about 405 and when the facility is operational it'll be a little over 300. Parsons is the contractor for the SWPF project including design, construction, testing and commissioning, and operations. There is a series of management self-assessments prior to this testing. This ensured all programs were in place prior to this testing. This testing has since been done with water. Chemicals will be introduced November 1<sup>st</sup>, 2017. This will be a simulant which will be close as possible to the nuclear materials. After the management self-assessment there are a series of operational readiness reviews done by the contractor and then DOE will do their own ORR. Once the authorization to operate is given, additional testing will be done prior to starting operations. This disciplined process is to ensure everything is in order prior to bringing in nuclear materials which can be time consuming but it is important for safety and correcting any issues. Currently among testing and evaluation efforts, a temporary simulant tank farm has been designed and construction is underway. She provided additional graphics and terminology for this detailed testing and analysis process. She noted some of the improvements made as a result of this process include the development of an improved solvent which significantly increases the decontamination factor and throughput. This modification is being paid for out of the funds saved by coming in greatly under budget during the SWPF construction.

Mr. Harp began his presentation with a video of plans for integrating SWPF piping. He then explained the objectives for integrating SWPF piping, which includes supporting the SWPF start date. He then gave a history of SRR's involvement in the SWPF preparations to begin operations, and listed the current modifications taking place. This process coincides the DWPF melter outage. He provided multiple graphics to depict the piping integration in process and further explained it as the video described, including what is currently completed and what is planned for the future. The safety-basis controls he listed are:



waste acceptance criteria, communication protocols, termination of transfers, facility isolation, monitoring of transfers, facility isolation, monitoring of transfers, and response to natural phenomena. He then provided photos of the construction progress. He then explained some updates/statuses regarding personnel, troubleshooting, repairs, training, equipment transfers, and emergency preparedness drills.

#### Q&A Session

Ms. Gillas asked about equipment capacity for processing materials. Mr. Harp referred to a graphic he displayed during his presentation with these numbers.

Ms. Corbett asked if the emergency planning included tornadoes and if that caused piping damage. Mr. Harp replied that the majority of piping is below grade as low as 25 feet. He noted that staff has been trained to deal with the event of piping damage. He then went on to say there are leak detections in place with alarms to notify of any leaks in less than 2-3 minutes. In the event of a leak he noted there is a protective jacket so any leaks would be contained.

Mr. Hoel asked what the chemical simulant is and how it will be disposed after testing. Ms. Marks replied that is a formula developed by SRNL and she is not able to disclose that to the public. Mr. Hoel asked if it would be a hazardous waste and Ms. Marks replied that it would not. Mr. Hoel asked if a transition would occur in contractors what would be implemented to assure that would not affect the schedule. Ms. Marks replied that there is a tremendous amount of communication and planning being done to assure that wouldn't happen. She also noted that if there was to be a change in contracting company, a majority of the staff would be retained.

Mr. Allensworth asked how many people would be added. Ms. Marks noted that additions to staff have already been added. Mr. Allensworth asked if these are internal or outside hires. Ms. Marks noted it included both.

#### Presentation: Wounded Warrior Program – Tony Towns, DOE-SR

Mr. Towns began his presentation with an overview and history of the Wounded Warrior/Mobility Impaired Hunts. This includes a deer hunt, turkey hunt, and fishing challenge. In the future, a second turkey hunt will be added and a second fishing challenge will be added. New volunteers are needed including vendors or people to provide meals.

#### Q&A Session

Ms. Underwood asked if hunts will be added for other types of game. Mr. Towns replied that yes, hogs are prevalent and a possible future hunt. These hunts are regulated by state requirements for hunting. This does not include alligators but could include a future hunt for coyotes. The big question is how much support from volunteers and for meals they can find to enable additional events.

Mr. Howard thanked Mr. Towns for these programs which he noted means a great deal to soldiers and is inspiring.

Ms. Williams asked if deer hunts are still both in the mornings and afternoons. Mr. Towns responded that it is solely in the mornings now due to the number of coyotes eating deer fawns. Ms. Williams then asked if the deer hunts included hunting dogs. Mr. Towns noted that they do include hunting dogs, but other options are being explored. Ms. Williams asked how hunters are chosen. Mr. Towns replied that there is an application online and applicants are then chosen through a lottery system. Ms. Williams asked how volunteers are chosen to which Mr. Towns replied all volunteers are accepted as much as space is available. Ms. Williams went on to question how contaminants in the hunted game are monitored. Mr. Towns responded that a monitor is brought into the field. He also noted no turkeys hunted had registered a dose of contamination.

Mr. Hoel asked if there is pressure to cut down on these hunts due to budgeting. Mr. Towns noted that such pressure didn't exist and cost is minimal and volunteers dedicate their time and equipment for these hunts. The food is also provided from donations at no cost. Mr. Hoel asked what qualifications there are for volunteers. Mr. Towns noted that it is vital to be a badged employee and to know what you're doing as far as hunting goes. As well as to have the time to dedicate.

Michael Mikolanis, DOE-SR, noted that these programs are done at no cost to DOE-SR. He then noted that these events are not possible without the donations of food and volunteers.

Ms. Gillas noted that turkeys are in abundance on site in her experience. Mr. Towns noted that fawns are often eaten by coyotes just after birth making them easy targets.

#### Presentation: Federal Oversight of Cleanup – Rob Pope, EPA

Mr. Pope began his presentation by introducing the EPA and it's mission to protect human health and the environment. It sets regulations to implement laws and standards relating to this mission. It also enforces regulations. He displayed graphics with all of the country's regions. He noted that Oak Ridge and Paducah fall into the same region as SRS. He then explained what superfund or CERCLA is – Comprehensive Environmental Response Compensation and Liability Act and how it began in 1980 as well as what it's original goals are regarding cleaning up abandoned sites. He continued with a detailed history of CERCLA.

He then displayed national priorities in Region IV including DOE sites and DoD facilities. In 1989 SRS was added to the national priorities list which created a requirement for FFA. He also listed the federal laws for cleanup of federal facilities: CERCLA, RCRA, Oil Pollution Control Act, Safe Drinking Water Act, Clean Water Act, and Clean Air Act. The EPA goal for SRS water is to bring all groundwater and water in general up to drinking water standards. He then explained in detail the FFA at SRS. He explained EPA's role at SRS which is: oversight of remedial actions, ensure adherence to NCP, CERCLA, FFA and guidance, technical and procedural assistance, info, guidance and training. He noted that DOE, EPA and SCDHEC has to concur on what needs to be cleaned up at SRS and how that will be done prior to cleanup. After cleanup the remedy is regularly checked to be sure it's working. He then named his team and coordinating teams which help with these processes. He provided a graphic with a list of all current activities and projects EPA is working on at/with SRS. He then explained in detail HLW tanks and the status on those compliances at SRS.

#### Q&A Session

Ms. Weber asked for clarification of a map in one of the presentations slides. Mr. Pope explained that map again.

Ms. Corbett asked if Mr. Pope was contacted for the recent story in the Post and Courier – he answered he was not. She then asked if they produced a report on sites. Mr. Pope replied that on the EPA website there is a summary of everything they have at the site including contaminants.

Mr. French asked about Hanford closing tanks vs SRS tanks. Mr. Pope replied that tanks at SRS and Hanford differed greatly because they did not comply with EPA suggestions.

Mr. Howard asked about cleanup of meth labs. Mr. Pope noted those are emergency response projects such as an overturned train. He noted the law enforcement agencies take action and then turn to EPA for cleanup.

Ms. Underwood asked how regions are divided. Mr. Pope noted that it's a result of politics and regional offices.

Ms. Hopson asked about Shell Bluff. Mr. Pope replied that community is concerned there's not enough monitoring done there. A CAB recommendation expressed that concern and SREL has responded by committing to monitoring that area through sampling. There's a concern about radiation and contamination there. EPA will examine the findings. SREL is holding outreach meetings with the community at which they can voice their concerns and SREL can relay their plans for sampling.

#### Presentation: Community Reuse Organization – Rick McLeod, SRSCRO

Mr. McLeod began his presentation stating the origins of SRSCRO: Section 3161 of the Defense Authorization Act of 1993 initiated the creation of CRO's across the US in response to the negative social and economic impacts of workforce restructuring. DOE made a commitment to provide financial assistance for economic development and site reuse activities developed by the affected communities. 15 were formed across the US. SRSCRO was chartered in 1993 and designated as the CRO for SRS by DOE-SR in 1996. SRSCRO is a regional organization with board members from both Georgia and South Carolina. Its focus areas are economic development including asset revitalization, workforce including their nuclear workforce initiative, and community issues such as their SRS economic impact study. SRSCRO responsibilities regarding their asset transition program include: developing a local economic development plan, describing the personal property needed for the specific economic projects to be accomplished, requesting title to any property that meets the economic plan requirement and that DOE determines is not needed. Their assets transition program is a mutual agreement between DOE and SRSCRO signed in December 2005, revised in May 2012. It allows for the official transfer of selected excess personal property and related personal property assets from SRS to SRSCRO. Bottom line is that most DOE assets are 60 years old and not sustainable for modern competitive business, so the large majority of assets get liquidated for cash. Some of the SRSCRO program investments include: infrastructure improvement, economic development, workforce education and training, staff support and community issues, asset revitalization and SRS reindustrialization.

#### Q&A Session

Ms. Spinelli asked about adding Allendale to the SRSCRO and Mr. McLeod noted they've already been a part of SRSCRO.

Mr. Allensworth asked about Aiken Tech's program. Mr. McLeod answered they started a nuclear fundamentals course as a result of a need for operators at SRS.

#### Presentation: Recruitment & Retention – Lee Moody, DOE-SR; Carol Barry, SRNS; Dave Hollan, SRR

Mr. Moody began his presentation with a diagram of graphics in job series, count and percentage. One of the key findings from FY 17 he noted as 69% of SR employees are 50 years old or older making SRS the highest concentration of employees in the 50-59 years of age range. 46% of the SRS workforce is at the GS-14 level or above. 23% of the SRS population are currently able to regular retirement and an additional 20% are eligible for early retirement. He continued to display multiple graphics depicting more of these demographics and noted that recruitment efforts are currently being executed. He noted there are issues with filling positions and recruitment due to the presidential memorandum regarding a hiring freeze. He explained backup plans for a shortage of federal employees including utilizing current contractors.

Ms. Barry began her presentation by displaying a graphic depicting SRNS outreach to students including interns, teachers, schools and funding provided by SRNS to higher education institutions. SRNS has also established a Nuclear Operations Program at Aiken Technical College which includes a certificate program for future nuclear facility employees. SRNS also participates in SRSCRO. Ms. Barry noted SRNS uses predictive analysis to forecast attrition and retirement impact. This analysis is used to prevent a gap in employee numbers due to retirement. This has greatly reduced their attrition rate. Also to aide with this they have implemented development opportunities and improved compensation and benefits. SRNS has also engaged their workforce increasingly and improved work spaces as well as services such as food services and cafeterias. She then displayed graphics depicting employee demographics.

Mr. Hollan began his presentation with graphics depicting employee demographics noting when workforce reductions. He continued by describing SRR recruitment and retention drivers and challenges including aging workforce, on-going generational shifts and SWPF outages. He went into detail regarding their attrition rate management which is ongoing by anticipating retirement numbers, career goals discussions, and hiring waves. He noted that hiring activity is increasing as a result of restored funding.

### Q&A Session

Mr. Howard asked how all three organizations fair with retention in comparison to the military's. Mr. Moody noted DOE-SR advertises to current and former military members through outreach in person and listing jobs on the USA Jobs website. Mr. Howard then asked if the answer is true for critical positions. Mr. Moody answered yes. Ms. Barry noted that SRNS also targets recruitment efforts towards IT positions. Mr. Hollan noted the same is true for SRR.

Mr. Vovakes asked regarding SRR and SRNS how much is invested in employee training in days per year. Ms. Barry answered if he was asking regarding training or development, then noted she does not have a days per year calculation but could provide one later. She also noted that for specific critical positions they undergo a number of training days per year and efforts are being made to shorten training to get employees in the field as soon as possible while still meeting requirements which depend on the facility. There is site-specific and facility-specific training. Mr. Hollan answered that there is site-specific training and additional resources are being added solely for that purpose. Mr. Vovakes then asked why DOE-SR is falling so far below the level of authorized workforce. Mr. Moody replied DOE-SR waits for the approved budget and recent hiring freezes. Mr. Vovakes then asked the DOE attrition rate. Mr. Moody responded it is 9.4% annually which equates to about 18-20 people.

Ms. Underwood asked if internships are paid. Ms. Barry answered yes.

Mr. Allensworth asked if DOE-SR forecasted retirements. Mr. Moody responded that DOE-SR does forecast retirements. Mr. Allensworth then asked if forecasting has changed because of the market. Ms. Barry responded it had not because it has stayed similar. She then added that more information is available through pension websites. Mr. Allensworth then asked about department of labor restrictions and if that has affected SRNS. Ms. Barry responded that it had not.

Ms. Patterson asked which high schools SRNS performed outreach in. Ms. Barry noted their programs are offered in all local areas per superintendent requests. Ms. Patterson then asked if the VERA program was offered at all sites. Mr. Moody noted it's offered for all sites until the end of June in 2017.

Mr. McMichael and Mr. Smith noted the large positive economic impact SRS has on the local areas. Mr. McMichael then asked how long it takes for someone to receive a security clearance to work at the site and referenced an example of an extremely long wait time. Ms. Barry responded that clearance time depends on each individual situation, and SRNS is trying to get that time reduced. Some of that is dependent on getting paperwork done prior to coming to work at the site which causes longer delays. Providing attention to that has reduced that time. SRNS intends to cut it further by improving the onboarding process.

Mr. Vovakes asked regarding newly retired federal employees if they can be hired again. Mr. Moody noted some of those employees are brought back as contractors.

Mr. Allensworth asked if SRNS could summarize their program at Aiken Tech. Ms. Barry provided a synopsis of this course and the topics covered as well as the certificate process including statistics of graduates and hired graduates.

Ms. Corbett asked if MOX employees would be hired elsewhere on the site as SRNS contractors. Ms. Barry noted that some already have and could in the future.

### Public Comment

Janie Scott, GA WAND, thanked DOE-SR for their continued support of REMOP activities and summarized the previous meeting as well as GA WAND's participation. She noted GA WAND is concerned with increased Tritium extraction and local contamination.

Lindsey Harper, GA WAND, noted there's a budget increase for H-Canyon and GA WAND feels that processing should be halted until a federal repository is established. She then asked what are the environmental effects of the processing done in H-Canyon.

Annie Stevens asked what the spirit from the CAB and the humanity of Shell Bluff and surrounding communities. She noted Burke County is her home and family, noting a fear of people within the community. She noted people are dying of cancer surrounding the SRS. She noted Jesus will have mercy on us all so we as a people can be saved. She noted she understands the fear of the people of the community and not wanting to come to CAB meetings. She noted they are poor and uneducated and work from SRS currently or in the past. She further noted that what affects one affects all.

Joe Ortalda noted how important SRS is for the economic welfare of the community. He noted the public should be positive and open-minded for new projects considered at the site. The population, he feels, would dramatically decrease in the local area if no new things came to the site.

Voting: Draft Recommendation

#### Drone Spotting Over SRS

Ms. Spinelli asked for a motion to vote on closing this recommendation which was given and seconded. She then opened up discussion which no one participated in. A vote was taken to close this recommendation with 23 yes, no opposed and no abstaining.

Voting: Draft Recommendation

#### Curation Facility

Ms. Spinelli asked for a motion to vote on closing this recommendation which was given and seconded. She then opened up discussion which no one participated in. A vote was taken to close this recommendation with 22 yes, no opposed and 1 abstaining.

Voting: Draft Recommendation

#### H-Canyon

Ms. Spinelli asked for a motion to vote on closing this recommendation which was given and seconded. She then opened up discussion which no one participated in. A vote was taken to close this recommendation with 23 yes, no opposed and no abstaining.

Voting: Draft Recommendation

#### Oppose Consolidated Interim Storage of SNF and High-Level Waste at SRS

Ms. Spinelli asked for a motion to vote on closing this recommendation which was given and seconded. She then opened up discussion which no one participated in. A vote was taken to close this recommendation with 16 yes, 6 opposed and 1 abstaining.

~Meeting adjourned

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