

**Meeting Minutes**  
**Savannah River Site Citizens Advisory Board (CAB) – Combined Committees Meeting**  
**Augusta, Georgia**  
**January 27, 2014**

**Monday, January 27, 2014 Attendance:**

**CAB**

Thomas Barnes  
Dr. Donald Bridges  
Ed Burke  
William Calhoun  
Louie Chavis  
Robert Doerr  
Kathe Golden  
Jessica Grainger  
Dr. Rose Hayes  
Dr. Virginia Jones  
Cleveland Latimore – *Absent*  
Clint Nangle  
Dr. Marolyn Parson  
Larry Powell  
Dr. William Rhoten  
Earl Sheppard  
Harold Simon  
George Snyder  
Nina Spinelli  
James Streater  
Ed Sturcken  
Christopher Timmers  
Louis Walters

**DOE**

David Moody, DOE-SR  
Sandra Waisley, DOE-SR  
Jean Ridley, DOE-SR  
Rich Olsen, DOE-SR  
Angelia Adams, DOE-SR  
Avery Hammett, DOE-SR  
Maxcine Maxted, DOE-SR  
Pat McGuire, DOE-SR  
Doug Hintze, DOE-SR  
Gail Whitney, DOE-SR  
Jim Guisti, DOE-SR  
Gerri Flemming, DOE-SR  
Jim Folk, DOE-SR

**Agency Liaisons/Regulators**

Rob Pope, EPA  
Trey Reed, SCDHEC  
Shelly Wilson, SCDHEC  
Kim Brinkley, SCDHEC  
Heather Cathcart, SCDHEC

**Stakeholders**

Dianne Valentin  
Tom Clements  
Christine Jones  
Arleatha Man  
Tara Hands  
Amanda Hill-Attkisson  
Annie Laura Stephens  
Clara Delbert  
Eleanor Hopson  
Cee Cee Anderson  
Courtney Hanson  
Nancy Bobbitt  
Yolanda Whyte  
Bernice Howard  
John Lindsay  
Willie Tomlin  
Charles Utley

**Contractors**

Amy Meyer, SRNS  
Kristin Huber, SRNS  
Bill Bates, SRNL  
Mark Schmitz, SRR  
Ashley Whitaker, NOVA  
James Tanner, NOVA  
Jesslyn Anderson, NOVA

CAB Facilitator, Ashley Whitaker, NOVA, welcomed everyone to the meeting. She reviewed the day's agenda and Meeting Rules of Conduct. She stated a public comment period was scheduled for the end of the meeting and reminded everyone how to access electronic copies of meeting materials through the CABNET feature. She welcomed CAB Chair Donald Bridges to open the meeting.

CAB Chair Bridges welcomed everyone to Augusta, Georgia (GA). He thanked the CAB Support Team for the meeting arrangements, and opened the meeting.

**PRESENTATION: Recommendation & Work Plan Update – Jesslyn Anderson, NOVA Corporation**

Ms. Jesslyn Anderson, NOVA, provided an update on the recommendation status report and Work Plan progress. She stated the CAB had adopted 13 recommendations since January 2013. She provided an update of the CAB Work Plan and highlighted each committee's progress so far for the year.

**Discussion: Budget Overview – Doug Hintze, DOE-SR**

Mr. Doug Hintze began the budget discussion by explaining how the funding amount was better than in the past; however, he explained that since Congress did not split the budget amount between each of the Program Budget Summaries (PBS), he did not have a total amount number. He explained that DOE-SR was currently working with Headquarters (HQ) and the Office of Management and Budget (OMB) to figure out what that split would be. Mr. Hintze

pointed out that PBS's consolidated under Risk Management Operations was consistent with the President's Budget Request and was significantly more than DOE-SR had last year. He discussed the Liquid Waste PBS, which he said was 13 million dollars more than the President's Budget Request. He said DOE-SR was deciding how the extra funding would be used. He said the Salt Waste Processing Facility (SWPF) budget increased, which dealt with construction completion and the need for funding to begin startup and commissioning. He discussed the remaining accounts and pointed out the amount of funding received for the CAB, South Carolina Department of Health and Environmental Control (SCDHEC), and Environmental Protection Agency (EPA), was consistent with what DOE-SR requested. He explained that DOE-SR had not received the total amount for Safeguards and Security at that time, but he believed the amount would be at least what DOE requested. He said since DOE-SR had an appropriation, if a Continuing Resolution (CR) occurred in the future, DOE-SR's budget would be based on the current budget instead of the FY 2012 budget. He said DOE-SR was revisiting all the baselines and scope that were included within the President's Budget Request was submitted over a year ago. He said DOE would be able to provide the CAB with more information once the baselines were revisited.

CAB member Kathe Golden asked what percentage of PBS 100 went to the CAB. Mr. Hintze replied approximately four to five percent.

CAB member Ed Burke asked if the budget changes would impact the timing of the SWPF being operational, and if the budget would enable the Defense Waste Processing Facility (DWPF) to process more material. Mr. Hintze said it would impact SWPF; however, he said he did not know exactly how DWPF would be impacted since DOE-SR was still determining what scope and facilities would be impacted.

CAB Chair Bridges asked how the increased budget impacted contractor staffing levels. Mr. Hintze said he could not confirm that increased funding meant an increase in contractor staffing.

CAB member Rose Hayes asked since there were no appropriations for the Glass Waste Storage Building (GWSB) #3 what would be done about storage space in the Defense Waste Processing area. Dr. David Moody, SRS Manager, replied that DOE was still looking at canister storage on a pad rather than building GWSB #3.

### **Nuclear Materials (NM) Committee Overview – Rose Hayes, Chair**

CAB member Rose Hayes listed the NM Committee members and reviewed the committee's purpose. She provided a recommendation status update, stating recommendations 307, 313, and 314 were open. She said she wished to discuss a draft letter to DOE about requesting another presentation on the lapse of appropriations.

### **Draft Letter Discussion**

#### **"CAB Letter Requesting Presentation on Lapse of Appropriations"**

CAB member Hayes introduced a draft letter that was asking DOE for an updated presentation concerning the lapse of appropriations and how it impacted NM programs at SRS. CAB Chair Bridges explained how the draft letter was reviewed by the Executive Committee for possible submission to DOE. CAB member Hayes then read and discussed the draft letter.

Mr. Patrick McGuire, DOE-SR, explained that information could be added to the NM 2014 Work Plan; however, he mentioned that Mr. Hintze's November 2013 presentation, that covered the impacts of the lapse of appropriations, was comprehensive of how SRS activities were impacted. Mr. McGuire said DOE-SR would never allow the risk of any operations or activities at SRS to increase as a result of a lapse of appropriations. CAB member Hayes said she would like to see the draft letter move forward to DOE, but she also wanted the topic to be included on the Work Plan.

CAB member Marolyn Parson said the Executive Committee supported signing the draft letter and said she felt the issue should also be included on the 2014 Work Plan. CAB member Burke mentioned that adding the topic to the Work Plan would be sufficient.

CAB member Nina Spinelli said she supported the draft letter since it seemed to be a good "bridge" from the 2013 Work Plan to the 2014 Work Plan. CAB member Virginia Jones said she appreciated the drafting of the letter; however, she did not support forwarding the letter to DOE since covering the issue on the Work Plan would be sufficient. CAB

member Hayes stated since the draft letter was already approved by the Executive Committee she felt the letter should be sent to DOE and added to the NM Committee 2014 Work Plan.

### **PRESENTATION: Topics of Consideration – Maxcine Maxted, DOE-SR**

Ms. Maxcine Maxted, DOE-SR, stated the purpose of her presentation was to provide potential topics the NM Committee could use to develop its 2014 Work Plan. She first referred back to the 2013 Work Plan topics. She listed the 2014 topics, which included:

- I. Nuclear Material Receipt and Storage
  - a. L-Basin Capacity update including Projected FRR/DRR receipts for the next year
- II. Nuclear Material Reuse and Disposition
  - a. Update on H-Canyon Missions
  - b. Sodium Reactor Experiment (SRE) Fuel Dissolution Campaign
  - c. 235-F Deactivation Status Update
- III. Strategic Initiatives and Policy Discussions
  - a. Status of Enterprise SRS – Nuclear Materials Initiatives
  - b. Nuclear Materials System Plan
  - c. “Total Number of Curies” presentation by Michael Mikolanis

CAB member Rose Hayes suggested adding a topic about developing a radioactivity roadmap for each SRS facility to understand radioactivity changes throughout the year. Ms. Maxted said tracking radioactivity throughout the year, in various facilities might be difficult, but she said she would discuss potential options with Mr. Michael Mikolanis, DOE-SR, since he presented a similar presentation in 2013..

CAB member Bill Calhoun asked how much foreign research reactor (FRR) fuel the United States government was responsible for and what percentage could potentially come to SRS. Mrs. Maxted explained that a National Environmental Policy Act (NEPA) document showed the total amount of FRR fuel. She said his concerns about the FRR would be included in the “L-Basin Capacity Update” on the Work Plan.

CAB member Hayes asked Ms. Maxted if she planned to provide new information about the Canadian and German materials. Ms. Maxted said DOE reached a decision on the Canadian liquids, which was an Amended Record of Decision (AROD) as well as the 1,000 bundles of (HFIR); however a decision had not been made regarding the German material. Ms. Maxted explained that DOE-SR’s decision must go through the NEPA process before members of the public would be able to provide input on decisions. CAB member Hayes asked how long it was known DOE-SR would receive the Canadian material. Ms. Maxted said she would research the specific date for when the contract was signed with the Canadians but, explained that in March 2013 the AROD was signed to include the Canadian fuel.

Ms. Amanda Hill-Attkisson, WAND, asked about the Risk Assessment piece Ms. Maxted was discussing earlier in her presentation. She asked if what was done with the material was included as part of the Risk Assessment. Ms. Maxted said, “Yes,” and explained how the Safety Analysis included various exposure scenarios. Ms. Attkisson asked if when DOE referred to dose, if that included all the potential exposure levels. Ms. Maxted answered, “Yes.”

### **Administrative & Outreach (A&O) Committee Overview – Nina Spinelli, Chair**

CAB member Nina Spinelli reminded everyone that CAB Committee Chair elections were scheduled for later that day. She encouraged everyone to visit the CAB Facebook page and website at [cab.srs.gov](http://cab.srs.gov). She reminded CAB members to contact the CAB Support Team if they had future newsletter ideas. She stated all newly selected CAB members from the 2014 Membership Campaign were scheduled to attend the March Full Board meeting. CAB member Spinelli then welcomed Ashley Whitaker, NOVA, to begin the A&O Topics for Consideration presentation.

### **PRESENTATION: Topics of Consideration – Ashley Whitaker, NOVA Corporation**

Ms. Ashley Whitaker, NOVA, began her presentation by listing the 2013 Work Plan topics and the proposed Work Plan topics for 2014. There was an additional Work Plan topics suggested for the A&O Committee, which was to research and coordinate a student intern program.

- Oversee elections of the CAB chairpersons

- Track and report on member attendance
- Coordinate input to revision of Internal Processes
- Review Membership Package prepared by the DOE
- Coordinate Speakers Bureau Presentation
  - Train Speakers
  - Arrange for CAB members to be able to present
  - Coordinate Speakers Bureau Digital Video Disc (DVD)
- Coordinate Social Media for the CAB
- Solicit/Coordinate topics for the CAB's Newsletter
- Pursue other outreach ideas
- Research and coordinate a student intern program

**Due to a winter weather advisory, the second day of the SRS CAB's January 28 meeting was cancelled. However, in order to conduct official business, a special Full Board meeting was called on the afternoon of January 27, 2014.**

### **Committee Chair Elections**

CAB member Spinelli revealed the results of the Committee Chair election. CAB members elected Mr. Earl Sheppard as the Waste Management Committee Chair, Mr. Clint Nangle as the Strategic & Legacy Management Committee Chair, Mr. Tom Barnes as the Facilities Disposition & Site Remediation Committee Chair, Ms. Rose Hayes as the Nuclear Materials Committee Chair, and Ms. Nina Hazen as Administrative & Outreach Committee Chair.

### **Facilities Disposition & Site Remediation (FD&SR) Committee Overview – Marolyn Parson, Chair**

CAB member Marolyn Parson listed the FD&SR Committee members and reviewed the committee's objectives. She provided a recommendation status update, stating recommendations 293, 294, and 315 were open. She stated during 2013, DOE presented two updates of building 235-F and said she wanted to change the status of recommendation 293 from "open" to "closed." She discussed recommendation 294 before stating she wanted to change the recommendation status from "open" to "closed with exception." She asked CAB member Tom Barnes to discuss the DOE response to recommendation 315 before she reviewed discussions from the December 3, 2013, Committee meeting. She said the FD&SR Committee decided to draft a recommendation after discussing environmental monitoring issues with Ms. Gail Whitney, DOE-SR, Ms. Kim Newell, SCDHEC, and Ms. Diedre Lloyd, EPA. She explained that due to the weather predicted for the next day the Savannah River Ecology Laboratory (SREL) Update presentation by Dr. Gene Rhodes, SREL, would be rescheduled. She then welcomed Ms. Avery Hammett, DOE-SR to begin her presentation.

### **PRESENTATION: Topics of Consideration – Avery Hammett, DOE-SR**

Ms. Avery Hammett, DOE-SR, stated the purpose of her presentation was to provide potential topics for the FD&SR Committee to use in developing its 2014 Work Plan. She provided the list of 2013 Work Plan topics to show that the FD&SR Committee completed its entire Work Plan. She listed the 2014 topics, which included:

- I. Annual Integrator Operable Units Program Update
- II. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), and Federal Facility Agreement (FFA) Compliance at SRS.
- III. Federal Facility Agreement (FFA) Appendix E Projected Changes
- IV. Federal Facility Agreement (FFA) Appendix E Major Proposed Changes
- V. Mixed Waste Management Facility (MWMF) Phytoremediation Project Western Expansion
- VI. Savannah River Ecology Update
- VII. Federal/ State Regulatory Oversight of Cleanup Activities
- VIII. SRS Annual Site Environmental Report
- IX. Dunbarton Bay Remediation

CAB member Parson suggested adding a topic about the annual Emergency Preparedness plan since she was informed of a new dispersion model for the calculated off-site and on-site exposures. Ms. Hammett explained she would work

with the NM group to locate that information. CAB member Parson said she attended a DOE sponsored workshop by the National Academy of Sciences (NAS) and the topic of the workshop dealt with risk based approach to cleanup at highly contaminated sites, such as SRS. CAB member Parson asked if a topic about for a topic to be added about innovative risk management approaches could also be added to the 2014 Work Plan.

### **Draft Recommendation Discussion**

#### **“Fund an Independent Environmental Monitoring Program in Georgia”**

CAB member Golden introduced a draft recommendation, and asked if anyone had additional comments. CAB Chair Bridges said he did not agree with the recommendation since he felt DOE-SR had an existing environmental monitoring program.

CAB member Hayes asked if the sampling plan suggested in the draft recommendation would be redundant compared to the monitoring DOE already conducted. Ms. Angelia Adams, DOE-SR, said the established monitoring programs at SRS were sufficient since data collected showed no new releases and reduced contaminant levels.

CAB member Spinelli suggested including “Environmental Protection Agency” to item number one of the draft recommendation. Mr. Rob Pope, EPA, explained the environmental monitoring DOE-SR and SCDHEC conducted around SRS was not conducted under an EPA environmental regulation program. Mr. Pope said the original GA sampling was partly funded by DOE; however, EPA never participated in the agreement. Mr. Pope also said EPA did not collect joint samples with SCDHEC, DOE, or GA. He said during environmental monitoring there were times when EPA conducted joint sampling on the cleanup program, but only involving situations inside SRS or when EPA suspected a spill or groundwater release came from SRS. After Mr. Popes explanation, CAB member Golden suggested removing “EPA” from the draft recommendation.

Ms. Amanda Hill-Attkisson, Women’s Action for New Directions (WAND), said conversations to possibly restore monitoring in GA had occurred between GA and DOE-SR. She said the waste at SRS should be handled safely in order to protect citizens. She said since DOE announced its intention to offer GA additional environmental monitoring funds in a memo dated April 13, 2010, she said she hoped DOE would honor its commitment and reinstatement the program.

Mr. Bill Lawless, public, said there were already locations in GA that collected data from environmental releases and results indicated that releases from SRS were insignificant. Mr. Lawless explained that GA had a monitoring program in the past; however, he said there were more important issues to focus on at SRS besides helping Georgia Department of Natural Resources (GADNR) conduct sampling.

Ms. Courtney Hanson, GAWAND, thanked the CAB for drafting the recommendation, as well as hearing the concerns of several GA citizens. She said more than 400 GA citizens had written to the CAB in support of the draft recommendation. She discussed results from a 20014 last study GADNR conducted, which showed elevated levels of radionuclides in fish and leafy vegetation. She said she appreciated the CAB’s support.

Dr. Yolanda Whyte, public, stated she was in full support of environmental monitoring since any level of radiation was unacceptable. She thanked CAB member Parson for addressing the NAS report on conducting cumulative risk assessments. Dr. Whyte said in 2009 a panel recommended the EPA conduct cumulative risk assessments at every stage in order to protect vulnerable populations.

Mr. Willie Tomlin, public, said he was concerned about the citizens of Burke county and how advances in technology could assist with protecting citizens from the effects of radiation. He asked DOE to assist with reestablishing the environmental monitoring program.

Ms. Cee Cee Anderson, public, thanked the CAB for drafting the recommendation and said the need for environmental monitoring at offsite locations in GA was imperative since GA was located downstream of SRS. She explained that SC residents were able to make informed decisions about their state since information was provided information on sampling results; however, she said GA residents should also receive results of monitoring conducted in GA in order to make better informed decisions.

CAB member Hayes asked why DOE decided to cancel the original monitoring program with GA. CAB member Burke said the press release Ms. Hill-Attkisson discussed must have been a tentative agreement to begin a monitoring

program; however, he thought when funding became an issue, DOE-SR began looking at areas that could be eliminated. CAB member Hayes asked if DOE said they would implement a program and if there was a reason to still fund the program if funding became available. Ms. Angelia Adams, DOE-SR, suggested that CAB member Hayes' concerns be added to the draft recommendation so that DOE could respond accordingly.

### **Waste Management (WM) Committee Overview – Ed Burke, Chair**

CAB member Ed Burke listed the WM Committee members and reviewed the committee's purpose. He provided a recommendation status update, stating recommendations 304, 310, 311, and 312 were open. He reviewed each recommendation and the DOE responses. He stated he wanted to change the status of recommendation 310 from "open" to "closed" since DOE agreed to request sufficient funding for all the FFA agreements in the future. He said he had planned to bring forward a draft recommendation; however, the WM Committee decided to work out a few details before discussing it at the Full Board. He then welcomed Ms. Jean Ridley, DOE-SR, to begin her presentation.

### **PRESENTATION: Topics of Consideration – Jean Ridley, DOE-SR**

Ms. Jean Ridley, DOE-SR, stated her presentation consisted of topics the WM Committee could potentially use to develop its 2014 Work Plan. She listed the 2013 Work Plan and mentioned the WM Committee completed its entire Work Plan. She continued by listing the potential 2014 Work Plan topics, which included:

- I. Solid Waste
  - a. SRS Legacy Transuranic (TRU) Waste Program
    - i. Status and schedule for project completion
    - ii. Waste Isolation Pilot Plant (WIPP) shipping
    - iii. DOE 435.1 Order Revision Presentation
- II. Liquid Waste
  - a. Liquid Waste FY 2013 Accomplishments
  - b. System Plan Rev. 19 (2012 CAB Recommendation 297) (CAB Recommendation 312)
  - c. Glass Waste Storage Project Status
  - d. Tank Closure Status
    - i. Closure progress on High-Level Waste tanks 12 and 16
    - ii. H-Tank Farm Waste Determination
  - e. Salt Waste Processing Overview
    - i. Actinide Removal Project/ Modular Caustic Side Solvent Extraction Unit (ARP/MCU)- Next generation solvent operating performance (CAB Recommendation 312)
    - ii. Saltstone Disposal Unit 6 Construction Progress
    - iii. Salt Waste Processing Facility (SWPF) Project Baseline

CAB member Burke asked for the proposed topics about the Glass Waste Storage Project status to address issues such as funding restraints and impacts of incremental funding. CAB Chair Bridges suggested adding "continuous newly generated TRU Waste" under the WIPP shipping bullet.

CAB member Hayes asked if discussions were underway to change the language of tank cleaning criteria. Ms. Ridley said she did not know of any intent to change the cleaning criteria language since the criteria was an agreement between DOE, EPA, and SCDHEC. Ms. Ridley explained that a change in cleaning criteria depended on the revision of DOE Order 435.1; however, she said she did not expect the language to change. CAB member Hayes asked what the process would be to change the requirements between the agencies for DOE Order 435.1. Ms. Ridley said she had not seen anything regarding the revision of DOE Order 435.1 since the revision had not been released to DOE or for public comment; however, she said she did not think the three agencies were discussing revising the language of "maximum extent practical."

Mr. Bill Lawless, public, said at one time there were plans to construct a new GWSB; however, he said since that would not be happening, he thought it was important to explore ways of removing vitrified High-Level Waste canisters from SRS. He asked if DOE-SR had plans to remove the waste and if plans were underway.

Dr. Moody explained there were plans for moving forward with demonstration facilities for Defense High Level Waste, and the canisters at SRS were considered to be included as inventory for those demonstration facilities. Dr. Moody said additional work on alternate facilities and alternate approaches, like WIPP, would need to be discussed; however, he said DOE would have limited ability to discuss future plans until other major decisions were made. Dr. Moody said DOE-SR would provide the CAB with as much information available to be discussed with the public.

### **Strategic & Legacy Management (S&LM) Committee Overview – Clint Nangle, Chair**

CAB member Clint Nangle listed the S&LM Committee members and reviewed the committee's focus. He provided a recommendation status update, stating recommendations 288 and 316 were open. He changed the statuses of both recommendations from "open" to "closed." He welcomed Mr. Rich Olsen, DOE-SR to begin his presentation.

### **PRESENTATION: Topics of Consideration – Rich Olsen, DOE-SR**

Mr. Rich Olsen, DOE-SR, stated his presentation would provide potential topics for the S&LM Committee to use in developing its 2014 Work Plan. He listed the 2013 Work Plan and said the S&LM Committee completed its entire Work Plan. He listed the 2014 topics, which included:

- I. Planning and Execution Updates
  - a. Environmental Management Integrated Lifecycle Plan for Cleanup Program
  - b. Environmental Management Performance Metrics Fiscal Year Targets
  - c. Enterprise SRS Status
- II. Budget Request and Congressional Funding
  - a. Appropriations Status
  - b. CAB participation with Fiscal Year 2016 Integrated Priority List (IPL)
- III. Update on SRS Natural Resources Management
- IV. Update on Savannah River National Laboratory (SRNL)
- V. Repurpose and Reuse of SRS Assets
- VI. Historic Preservation
- VII. Younger Generation working in the Nuclear Industry

CAB member Kathe Golden suggested adding an update on how some of the new innovations that came online at SRS are functioning.

CAB Chair Bridges suggested contacting Ms. Mindy Mets from the SRS Community Reuse Organization (CRO) to get her opinion on the needs and projections relative to the future need of nuclear workers in the area.

### **Draft Recommendation Discussion**

#### **"Technology of Groundwater Cleanup"**

CAB member Nangle discussed the draft recommendation; however, there were no further comments.

### **Public Comments**

Ms. Dianne Valentin, GAWAND, thanked the CAB for supporting the issue of environmental monitoring in GA by drafting a recommendation. She also asked everyone to please consider how the citizens are asking for monitoring.

Dr. Yolanda Whyte, public, said she felt a nuclear facility being located near communities where people live was "insane and reckless." She stated she felt it was also an environmental and economic injustice against defenseless communities, where communities of color disproportionately were affected. She stated any exposure to ionizing radiation, regardless of how far below the level of concern, was a risk factor and the least DOE could do was provide environmental monitoring.

Ms. Tara Hands, public, expressed her support for the CAB recommendation on environmental monitoring in GA.

Ms. Bernice Howard, public, said she heard several individuals at the meeting say the funding should be used to fund waste management, which she said she agreed with. She said funding should be spent to manage the health of public citizens in order to prevent further wasting of health.

Ms. Anna Howard Stephens, public, thanked the CAB for the draft recommendation and for allowing members of the public to attend the meeting. She explained how she understood DOE looked at environmental monitoring as a financial decision; however, she said she felt the decision should be made based on the citizen health and contamination exposure.

Mr. Charles Utley, public, he said monitoring of potential contamination in streams and rivers should be conducted. He thanked the CAB for having the “guts” to make the recommendation. He encouraged everyone to take this information seriously by managing resources to better the future.

Mr. Tom Clements, SC Sierra Club, said he supported the recommendation; however, on a personal level said he was impressed by all the members of the public in attendance. He addressed the issue of potential waste coming to SRS stating that recently learned that DOE could be removing U.S. and United Kingdom weapons grade plutonium from Japan. Mr. Clements said he supported bringing the material back to the United States for nonproliferation reasons, but he hoped DOE would inform the CAB of the potential material and disposition path. A copy of Mr. Clements’ article has been attached to this document.

Ms. Cee Cee Anderson, GAWAND, said she was “extending an olive branch” by bringing cookies to share with everyone at the meeting before she thanked the CAB for the recommendation.

### **Recognition of Retiring CAB Members**

Dr. Moody, DOE-SR, expressed his appreciation of the five members who were leaving the CAB. He presented the three CAB members in attendance, Kathe Golden, Ed Burke, and Donald Bridges, with a certificate and letter of appreciation for their dedication to the CAB.

**~Combined Committee Meeting Adjourned**



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**Meeting Minutes  
Savannah River Site Citizens Advisory Board – Full Board Meeting  
Augusta, Georgia  
January 27, 2014**

CAB Chair Bridges called for discussion of the November Full Board meeting minutes. There were no suggestions or comments regarding the minutes. He opened the floor for a vote; the CAB, with no opposition and no abstentions, approved the meeting minutes with 20 votes.

**Letter Voting**

**“CAB Letter Requesting Presentation on Lapse of Appropriations”**

CAB member Hayes called for a motion of this letter since there was no additional discussion. The CAB approved the letter with 18 votes of approval, two oppositions, and no abstentions.

**Recommendation Voting**

**“Fund an Independent Environmental Monitoring Program in Georgia”**

CAB member Golden reviewed the recommendation before CAB Chair Bridges called for a motion. The CAB approved this recommendation with 15 votes of approval, 3 oppositions, and no abstentions.

**“Technology of Groundwater Cleanup”**

CAB member Nangle reviewed the recommendation before CAB Chair Bridges called for a motion to accept this recommendation. The CAB approved this recommendation with 19 votes of approval, no oppositions, and no abstentions.

**Position Statement Renewal**

**“Citizens Advisory Board View of SRS Cleanup”**

CAB Chair Bridges reviewed the Position Paper up for renewal, which was originally adopted in January 2012. He called for a motion and the CAB renewed the position paper with 19 votes of approval, no oppositions, and no abstentions.

A copy of the letter, position statement, and two recommendations have been attached to this document.

**~Full Board Meeting Adjourned**

- <http://www.japantimes.co.jp/news/2014/01/27/national/return-arms-grade-plutonium-u-s/>

Cold War-era supply of 300 kg for Tokai fast reactor experiments enough to make 50 warheads

## **Return arms-grade plutonium: U.S.**

KYODO

- JAN 27, 2014 Washington has been pressing Tokyo to return over 300 kg of mostly weapons-grade plutonium given to Japan for research purposes during the Cold War era, Japanese and U.S. government sources said Sunday.  
President Barack Obama's administration, which is keen to ensure nuclear security, wants Japan to return the plutonium supplied for use as nuclear fuel in a fast critical assembly in Tokai, Ibaraki Prefecture, the sources said.  
The highly concentrated plutonium could be used to produce 40 to 50 nuclear weapons. Japan has strongly resisted returning the plutonium, which it says is needed for researching fast reactors. But it has finally given in to repeated U.S. demands, the sources said.  
Since last year, Japan and the United States have been actively discussing the matter, and Washington plans to forge an accord with Tokyo on the occasion of the third nuclear security summit in March in the Netherlands.  
To prevent nuclear materials from falling into the hands of terrorists, the U.S. government has called for eliminating and minimizing the use of such materials. Since the first such summit was held in 2010 in Washington at the initiative of Obama, the United States has been pressing Japan to return 331 kg of plutonium now kept at the Japan Atomic Energy Agency's fast critical assembly, the sources said.  
The facility, which attained criticality in 1967, is the nation's only critical assembly designed to study the neutron characteristics of fast reactors.  
Since some of the plutonium was made in Britain, the United States is also asking London's permission to transfer all of it to the United States, the sources said, adding the three nations are working out their policies on the matter, the sources said.  
The Education, Culture, Sports, Science and Technology Ministry and other researchers have argued that the plutonium in question is needed for research and is vital to producing good data.  
At present, Japan has about another 44 tons of plutonium, but its quality is not on a par with the plutonium used for research purposes, a Japanese expert said.  
Since the March 2011 nuclear crisis at Fukushima No. 1 nuclear power plant, the United States has expressed its concern to Tokyo over how it will use plutonium.

**Position Statement**  
**Citizens Advisory Board View of SRS Cleanup**  
**January 2014**

- Overview: The SRS Citizens Advisory Board (CAB) supports DOE's Cleanup Program and acknowledges that the process:
  - Is massive and very complex,
  - Could last up to 40 years, and
  - Could cost on the order of \$60 B to complete<sup>1</sup>.

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

- Priorities for Cleanup: The CAB supports the following priorities established by DOE:
  - Essential activities to maintain a safe and compliant posture.
  - Stabilization and disposal of radioactive tank waste: Liquid Radioactive Waste Program.
  - Receipt, storage, and disposition of spent nuclear fuel: Spent Fuel Program.
  - Consolidation, stabilization, and disposition of special nuclear material: Plutonium Disposition Program.
  - Transuranic and mixed/low-level waste disposition.
  - Groundwater and soil remediation.
  - Excess facilities deactivation and decommissioning.
- CAB's position on DOE's priorities are as follows:
  - The Radioactive Liquid Waste Program should be given top priority, adequate funding, and management attention.
  - Spent fuel Program should be given a higher priority beyond the FY 13 budget year, which allows for spent fuel receipts at SRS but does not provide a path forward for site removal.
  - The H-Canyon should remain fully operational to support processing and disposition of all spent fuel at SRS.
  - As the only such processing facility in the entire U.S., the H-Canyon should remain fully operational to support all future chemical separations and stabilization of DOE nuclear materials.
  - The Plutonium Disposition Program should also continue major priority and emphasis.
    - The disposition process for this material has gone on far too long (in excess of 10 years) and more decisive and definite measures should be taken.
- The CAB understands that a certain degree of balance will be necessary to carry out all of the programs including programs of lesser priority. For example, some funding of lesser priority programs may be necessary even when higher priority programs are not fully funded.
- DOE should keep the public informed, in a timely manner consistent with commitments to the State of SC, on measures being taken to disposition plutonium, spent nuclear fuel, and the removal of waste canisters from SRS.
- CAB's position on long-range future for SRS.
  - The Site should be postured to receive new missions based on historic Site capabilities.
  - DOE should be ever mindful of the unique environmental assets that the site offers, should be especially protective of the opportunities for environmental research, and allow the public to view and enjoy nature in this setting.

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<sup>1</sup> SRS Integrated Life-Cycle Baseline

# SAVANNAH RIVER SITE CITIZENS ADVISORY BOARD

P.O. Box A ♦ Building 730-B, Room 1184 ♦ Aiken, SC 29802



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**Federal Coordinator**  
**Gerri Flemming**

January 28, 2014

Dr. David Moody, Site Manager  
U.S. Department of Energy  
Savannah River Operations Office  
P. O. Box A  
Aiken, SC 29802

Dear Dr. Moody,

The recent government shutdown was fraught with potentials for the Savannah River Site (SRS), as well as all other sites in the Department of Energy (DOE) complex. In a general sense what were the lessons learned from this particular period of constrained budgets?

The SRS Citizens Advisory Board (CAB), in preparation for the November 18-19 Full Board, anticipated a pre-approved presentation addressing how SRS programs and projects were monitored and maintained during the government shutdown, what the impact of the government shutdown was on SRS programs and projects, and what the status of the programs and projects were following the shutdown. The intent of the request was constructive consideration of such issues as:

- Were there any indications from the downsizing experience that money can be saved for some programs or projects?
- Were there any indications that some programs or projects were at risk for a worst-case scenario as a result of the downsizing to a skeletal staff and security detail?
- In such a worst-case scenario, what resolutions were developed to control the risks
- As a result of the worst-case scenario, what plans were developed to inform the public of the possible risks and what actions were to be taken for and by the public?

At a minimum, the answers to the questions that the CAB asks can be used to help inform the Congress and Administration of the impacts and risks posed by a government shutdown at SRS and potentially all other sites in the DOE nuclear complex. These same answers can also be used to inform inquiring members of the public. Therefore, we are making a formal request to DOE for a response to these questions, along with another request that the presentation prepared by Maxine Maxted for the November 18-19 CAB Full Board meeting be given at the subsequent Full Board meeting. We are aware that the presentation given by Doug Hintze at the November 18-19 meeting addressed ramifications of the shutdown. However, it is the consensus of the CAB Executive Board that additional questions may develop as a result of the presentation which Mrs. Maxted was scheduled to present. There is still much to consider that may be useful as SRS programs and projects push forward in the complex cleanup effort and in preparation for future challenges such as budget reductions or another government shutdown.

Sincerely,

Dr. Donald Bridges, Chairperson  
SRS Citizens Advisory Board

cc:  
Kristen Ellis, EM-3.2, DOE-HQ  
Catherine Alexander, EM-3.2, DOE-HQ  
Terry Spears, Acting Deputy Manager, DOE-SR  
Sandra Waisley, DDFO, DOE-SR  
Angelia Adams, DDFO, DOE-SR  
Catherine Templeton, SCDHEC  
Sean Hayes, GADNR

The CAB's purpose is to provide advice and recommendations on environmental restoration, waste management, and related activities to DOE.

If you have questions or comments, please contact us at:  
Phone: 803-952-7884 • Toll Free: 1-800-249-8155 • Fax: 803-952-9228  
Email: [srsCitizensAdvisoryBoard@srs.gov](mailto:srsCitizensAdvisoryBoard@srs.gov)

For more information about the CAB, visit us at <http://cab.srs.gov>

### **Recommendation 317**

#### **Fund an Independent Environmental Monitoring Program in Georgia**

##### **Background:**

The Savannah River Site implements an extensive environmental monitoring program that goes beyond what is necessary to be in compliance with site permits. This separate monitoring program is done to satisfy Department of Energy Order 458.1 “Radiological Protection of the Public and the Environment.” In order to verify that the public and the environment are protected, Savannah River Site conducts a program to assess the potential radiological and nonradiological impacts to air, water, environmental media, and wildlife. Monitoring sites are located in both Georgia and South Carolina.

In addition to the Savannah River Site program noted above, the Department of Energy funds an environmental monitoring program that is carried out by the South Carolina Department of Health and Environmental Control. This program is called the Environmental Surveillance and Oversight Program. It is important to the citizens of South Carolina because it evaluates the effectiveness of Savannah River Site environmental monitoring activities and provides an independent source of information to the public about the contaminants in the environment from historical and current Savannah River Site missions. South Carolina Department of Health and Environmental Control issues annual reports of its findings.

In the past, the Department of Energy also funded an environmental monitoring program that was carried out by the Georgia Department of Natural Resources to assess the potential impact of Savannah River Site operations on the public and the environment. This program was in effect from 2001-2005.

##### **Comments:**

In the past two years, citizens of Georgia have repeatedly expressed concerns about the lack of an independent environmental monitoring program in Georgia similar to the one funded by the Department of Energy in South Carolina. While budget reductions and restrictions have made it difficult for the Department of Energy to fund a renewed environmental monitoring program in Georgia, one of the important functions of the federal government is to protect its citizens. As a result, the Department of Energy should take the concerns of the citizens of Georgia seriously and take actions to satisfy their concerns.

##### **Recommendation:**

The Savannah River Site Citizens Advisory Board recommends that the Department of Energy:

1. Initiate conversations with the State of Georgia for the purpose of funding an environmental monitoring program similar to the Environmental Surveillance and Oversight Program funded in South Carolina.
2. Initiate such conversations with the State of Georgia no later than April 1, 2014, with a goal of phasing in an independent environmental monitoring program no later than 2016.

**Recommendation 318**  
Technology of Groundwater Cleanup

**Background**

During SRS site operations in the 1950-1980s reactor fuel and target fabrication activities were conducted in the 300-M Area to provide input materials for production reactor operation. The fabrication processes utilized at the time involved use of organic solvents to clean the metals involved in the process much as a painter uses paint thinner for cleaning. The fabrication process at the time used large amounts of solvents known as volatile organic compounds (specifically trichloroethylene-TCE and tetrachloroethylene- PCE) and the handling and disposal of these organic solvents were not dealt with in an environmental friendly manner. It was common at the time to use settling basins for disposal of volatile organic compounds (VOCs). The use of settling basins would be prohibited under environmental regulations of today. Over a 30 to 40 year period a large amount of solvents were released to the surrounding soils and groundwater within SRS. It is estimated that as much as 3.5 million pounds of solvents were released through multiple sources.

In the late 1970s and the early 1980s it became clear that the release of these solvents posed a serious threat to the environment. Cleanup activities began in the early 1980s, and were later conducted under a SC Department of Health and Environmental Control Resource Conservation and Recovery Act (RCRA) Permit issued in 1987.

In a general sense it appears that the experience at SRS has been symptomatic of problems at all DOE productions sites such as Oak Ridge, Paducah, Portsmouth, Hanford, etc. All the sites seem to have similar groundwater problems with release of these non-radioactive, conventional VOCs.

Cleanup of the solvents from the groundwater included a number of treatment technologies including air-stripping, soil vapor extraction, recirculation wells and dynamic underground stripping. All of these technologies involved taking water from the soil and extracting the solvents in the water or removing solvents directly from the soil. A number of innovative and creative methods were used to both control the groundwater plume and remove the source contaminants. Over 4.8 billion gallons of groundwater have been treated and 1.4 million pounds of solvents have been removed from the subsurface since 1983.

The measures taken over the past 25 years have worked very effectively and the Site now indicates that no groundwater plume containing solvents will ever migrate off-site. The efforts taken to date make for a good news story for SRS

**Discussion**

SRS has made several presentations on this topic to the CAB. This is an ongoing program that has been underway for over 25 years and it has been very productive and effective. It seems from the progress to date that remediation is sufficiently mature that the information developed thus far should be shared widely with the other DOE sites and the public. With the success of the SRS program for groundwater cleanup it seems there would be a real opportunity to export this technology to other DOE sites. With

this in mind we are requesting the Site (and SRNL in specific) assess the program to determine if there are certain features that would be useful for technology transfer to other DOE sites.

**Recommendation:**

The SRS CAB recommends that the Department of Energy:

1. Assess the groundwater cleanup program with the idea in mind of determining if there are elements of the SRS groundwater cleanup program that would be useful to other DOE sites and industrial sites.
2. Develop a program for potentially assisting and advising other DOE sites of our experience and capabilities, as well as appropriate media outlets.