



January 2001 Meeting Minutes

SRS Citizens Advisory Board

January 22-23, 2001
Hilton Oceanfront Resort
Hilton Head Island, SC

Members Present

Bill Adams	Karen Patterson
Sallie Connah	Maria Reichmanis
Tom Costikyan	Lola Richardson
Beckie Dawson	Murray Riley
Mel Galin	P.K. Smith
Ken Goad	Jean Sulc
Perry Holcomb	Charleen Townsend
Brendolyn Jenkins	Bill Vogele
William Lawrence	Wade Waters
Jimmy Mackey	Beaurine Wilkins
Kathryn May	Carolyne Williams
Lane Parker	William Willoughby

Ex-Officio Representatives

Keith Collinsworth, SCDHEC
Tom Heenan, DOE
Kim Newell, SCDHEC

SCDHEC - South Carolina Department of Health & Environmental Control
DOE - Department of Energy

Board member Georgia Leverett was unable to attend and no Environmental Protection Agency Ex-Officio Members were present. The meeting opened with Tom Heenan serving as Designated Federal Official. Mike Schoener served as facilitator. The meeting was open to the public and posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

Outgoing Member Recognition

Greg Rudy, DOE-SR Manager, provided letters of appreciation to outgoing Board Members Bill Adams, Tom Costikyan, Georgia Leverett, Kathryn May, Lane Parker, PK Smith and Beaurine Wilkins. He then provided a brief update on SRS activities. He noted the contract extension with Westinghouse stating it provides the best assurance that the important work at the site will be completed since incentives are now associated with completed work. Mr. Rudy also noted the new administration changes, noting the message he will carry to the new administration regarding SRS focus on community, state and regulator relationships. He emphasized that the relationship with Georgia and South Carolina is central to SRS success. He also ensured the Board that he takes CAB recommendations personally and meets with his management regarding response to every recommendation. Karen Patterson presented the SRS CAB Statement of Principles to Mr. Rudy.

Approval of the Minutes

The Board approved the November draft meeting minutes with no changes.

Key Decisions Made During the Meeting

Recommendation 135 –High Level Waste Annulus Cleaning

Concerned about the low priority SRS appears to be placing on annulus cleaning, the SRS CAB recommends that:

1. SRS develop, test and have a method for annuli cleaning ready for use no later than 2007.
2. SRS develop a HLW tank annulus-cleaning plan with a schedule for demonstration of elements of the program to meet the above date and present the plan to the Waste Management Committee before the end of July 2001.
3. SRS provide periodic HLW tank annulus cleaning program updates to the Waste Management Committee containing applicable technologies and funding status.

Recommendation 136- Technology Investigation for PUREX Treatment and Incineration

The Board adopted recommendations based on reports of two DOE-HQ investigations for PUREX treatment and incineration and encouraged continued DOE consideration of incineration as the best available technology.

Public Comments

Gloria Williams Way, Vera Barnes Jordan and Larry Callair, introduced themselves as candidates for Board membership.

Agency Updates

Keith Collinworth discussed the Savannah River Fish Advisory and how traditionally it has been the States responsibility to communicate the fish advisory. However given the unique nature of SRS and multiple responsible parties, SRS and the regulators have arrived at strategy of how to integrate responsibility and supplement State communications activities. He asked for the Board's assistance as they look at various venues for reaching all people noting they would have to go beyond newspapers and websites. He emphasized the process must ensure that all people can make informed decisions about fish consumption.

Tom Heenan presented the Operations Update (see attachment) and noted the amount of work being accomplished. He announced that shipment of transuranic waste to the Waste Isolation Pilot Plan is in the hands of the State of New Mexico. SRS is ready to ship and future Operations Updates will quantify and track those shipments. Mr. Heenan also announced that after extended discussions with the State of Georgia, they had reached agreement on grants to significantly expand environmental monitoring by the Georgia Department of Natural Resources. He noted an independent scientific peer review of tritium migration under the river is also being funded as well as a monitoring program with the City of Savannah.

Facilitator Update

Mike Schoener presented the current recommendation status report noting 21 recommendations are pending, 25 are open and 90 are closed. The Board is awaiting three responses from EPA, one from SCDHEC and one from DOE. There have been no status changes in the recommendation database since the November meeting, he said. Mr. Schoener also noted the February 27 Combined Committee would focus on the SRS budget.

Nuclear Materials Committee Report

Nuclear Materials Stabilization Activities

Chuck Keilers of the Defense Nuclear Facilities Safety Board (DNFSB) discussed SRS nuclear material stabilization activities and DNFSB Recommendations 1994-1 and 2000-1 (see attachment). Mr. Keilers noted that the DNFSB is an Executive Branch Agency with independent safety oversight authority at defense nuclear facilities. Mr. Keilers stated that the bottom line is that the current schedule is unsatisfactory and there are opportunities for improvement. Just meeting the current schedule will require management attention, he said. Mr. Keilers discussed what has been accomplished since 1994, noting that eighty percent of the risk has been reduced over the last eight years. However, DOE became less interested in pursuing DNFSB Recommendation 94-1 and it will require another eight years to reduce the remainder of the risk. Therefore the DNFSB issued Recommendation 2000-1, which he stated complements the previous recommendation. He emphasized the two are not redundant.

Mr. Keilers stated that all other DOE sites are on track and it is not acceptable to let twenty percent of the risk linger at SRS. He discussed what remains to be done at SRS including safe disposition of Highly Enriched Uranium solutions and Americium/Curium solutions and resolution of the interagency agreement with the Tennessee Valley Authority. Mr. Keilers stated that DOE is on a path to shutdown a portion of the chemical separations facility in F Canyon in 2002. The DNFSB has encouraged DOE to make sure all materials are identified. He said the DNFSB also continues to be concerned with funding, noting DOE should consider a budget to match the plan instead of plan to match flat funding. Mr. Keilers noted current hot spots as higher than planned cost estimates and vendor/design delays with the Americium Curium project and incomplete NEPA activities by the Tennessee Valley Authority. Mr. Keilers responded to various questions from Board members regarding canyon deactivation, new administration impacts to DNFSB and unresolved issues between DNFSB and DOE.

Sachiko McAlhany, DOE-SR, presented a brief update regarding the Nuclear Materials Stabilization Program stating that 35 of 60 commitments have been completed (see attachment). In 2001, there are 30 commitments of which five have been completed, she said. Ms. McAlhany stated that DOE is in agreement with the DNFSB on areas of focus. Completion of DNFSB 2000-1 commitments is of the highest priority at SRS and the contractor is heavily incentivized to accelerate the program and execute the work safely, she said. Ms. McAlhany discussed the solutions to be stabilized and those completed to date.

Ms. McAlhany discussed plutonium repackaging noting the DOE Standard 3013 takes plutonium pellets out of plastic and packages it into a more robust container, which uses helium to package and is then heat treated. There is continued progress on conceptual design activities to install a long term plutonium packaging and stabilization line in Building 235-F and DOE is evaluating methods for further acceleration of near term capability in the FB Line. Ms. McAlhany discussed stabilization of special isotope solutions noting that Neptunium is driven by a programmatic need since it is used in production of Pu238 (used to power deep space missions). She stated the Americium Curium project design is fifty percent complete and that a four year schedule impact has been narrowed to maybe none or a matter of months. She stated the disposition of Highly Enriched Uranium Solution is on schedule to complete cleaning of the solution by September 2001 and that the project continues regardless of the delay in finalizing the agreement with the Tennessee Valley Authority to take the solution. The alternative is to blend the solutions to lower enriched uranium and convert it to a more stable form instead of using it as fuel, she said. Ms. McAlhany also noted that SRS is receiving plutonium residues from Rocky Flats, which are being stabilized in the F Canyon and FB Line.

F Canyon Operation Update

Sachiko McAlhany also provided an update regarding F Canyon operations. Chemical separation activities in F Canyon are currently scheduled to be completed by the end of fiscal year 2002. DOE efforts to identify all materials in the complex that could potentially require utilization of the canyons are nearing completion. Pending the results of this study, SRS will assess the impacts to H Canyon as a backup capability and assess whether it would be more advantageous to process some materials in the F Canyon. Ms. McAlhany emphasized that DOE does not want to prematurely shut down the canyons

however they have to analyze whether it is feasible and economical to maintain the 50-year old F Canyon in a readiness state from 2002-2005.

Waste Management Committee Report

High Level Waste Program Update

Larry Ling, DOE-SR, provided a presentation on the High Level Waste Program (see attachment). Mr. Ling provided updates on the High Level Waste (HLW) Tank Closure Environmental Impact Statement, Tank 19 activities, the HLW Evaporators, the Salt Waste Processing Project, the Consolidated Incineration Facility and the Glass Waste Storage Building Alternative Environmental Assessment. The Draft HLW Tank Closure EIS on the proposed closing of additional HLW tanks at SRS was released for public comment on November 24, 2000. The public comment period closed on January 23, 2001. A Record of Decision is expected Summer 2001. Mr. Ling discussed Tank 19 activities, which is scheduled for closure in 2003. He showed a video depicting a hydro-lancer used to breakdown hardened sludge deposits within the tanks so it could be transported to another tank prior to closing Tank 19. Mr. Ling discussed the HLW Evaporators noting that the 2F Evaporator is currently operating and the 2H Evaporator is shutdown due to buildup of solids in the pot. DOE is performing a readiness assessment to clean the evaporator with acid and plans to restart the evaporator this summer. Preventive maintenance is being conducted to ensure this buildup does not occur in the future. The 3H Evaporator has experienced problems in the receipt tank where cooling coils have leaked. DOE is evaluating whether to use an alternative receipt tank or to repair/replace the cooling coils.

The Salt Waste Processing Project is on schedule for a June 2001 technology selection, said Mr. Ling. DOE is evaluating four alternatives and will select a primary and backup alternative. Actual waste is being tested and a Supplemental EIS is in progress. DOE plans to run several pilot scale tests following technology selection, he said. A vendor forum will be held in February in Augusta, GA. Mr. Ling also provided an update on the Consolidated Incineration Facility. CIF operations are currently suspended and SCDHEC has modified the CIF permit to regulate it in a suspended mode. SRS is pursuing treatment alternatives for waste streams originally targeted for CIF. DOE will continue to work with the CAB CIF Focus Group, said Mr. Ling.

Mr. Ling reported that the Environmental Assessment prepared to evaluate the impacts from using storage units manufactured from depleted uranium trioxide to store Defense Waste Processing Facility canisters is on hold pending further evaluation and procurement strategy. Initially, the vendor would have disposed of the above-ground storage casks and now DOE will be responsible for disposition of these casks, therefore the EA is on hold pending further evaluation, he said. Bids have been received and the EA schedule and public comment period will be determined upon evaluation of bids.

HLW Tank Annulus Cleaning

Wade Waters presented a draft motion regarding the HLW Tank Annulus Cleaning (see attachment). He explained that the motion dealt with Type I and II tanks only. Both type tanks have a 5-foot high steel annular pan. The annulus is a two and one-half foot wide area between the steel primary tanks and the pan providing a path for ventilation. Leakage in nine of these Type I and II tanks has resulted in large quantities of insoluble salts remaining in the annulus of the tanks. Concerned about the low priority SRS appears to be placing on annulus cleaning, the Waste Management Committee draft motion recommended that:

- SRS develop, test and have a method for annuli cleaning ready for use no later than 2007.
- SRS develop a HLW tank annulus-cleaning plan with a schedule for demonstration of elements of the program to meet the above date and present the plan to the Waste Management Committee before the end of July 2001.
- SRS provide periodic HLW tank annulus cleaning program updates to the Waste Management Committee containing applicable technologies and funding status.

Jimmy Mackey moved the Board adopt the motion and Bill Vogele seconded. The motion was adopted by a vote of 23 members in favor and one abstention by PK Smith due to her affiliation as an employee with the HLW Program.

Technology Investigation for PUREX Treatment and Incineration

Perry Holcomb presented a draft motion regarding Technology Investigation for PUREX Treatment and Incineration (see attachment). Mr. Holcomb noted that this motion is a followup to Recommendation 129 which addressed many of the CAB's concerns regarding the need for identification of the best available technology for treatment of PUREX and other mixed low-level wastes within the DOE complex. The SRS CAB strongly believes that a best available technology investigation will not be complete with evaluating current or enhanced incineration technologies such as those already present at SRS. Through the CIF Focus Group, the CAB has been following two DOE-HQ investigations for PUREX treatment and incineration. The first is a panel of independent scientific experts (known as the Blue Ribbon Panel) exploring technological alternatives to incineration; and the second a Headquarters Study Team, which is assessing the demand for incineration within the DOE complex versus commercial treatment methods (including incineration) potentially available for onsite use. In response the recent reports, the Waste Management Committee draft motion recommends that:

- DOE-HQ use the alternative technology recommendation from the Blue Ribbon Panel (BRP) to address specific waste streams at the Idaho National Engineering and Environmental Laboratory (INEEL) and not expand the BRP's evaluations to different waste streams at SRS.
- The Headquarters Study Team consider operational improvements to existing DOE incineration technologies when it evaluates commercial treatment methods.
- DOE-SR continues to include incineration or, more specifically, the enhancement of CIF in its investigation for the best available technology to treat PUREX waste.
- DOE-SR considers and justifies any potential delays in the treatment of PUREX waste caused by using new emerging technology versus the use of the already existing CIF.

Bill Adams moved the Board accept the draft motion and Lola Richardson seconded. Following minor modifications, the motion was adopted by a vote of 23 members in favor and one abstention by Lane Parker due to his affiliation with a local labor union.

Environmental Remediation Committee Report

Jimmy Mackey presented a letter of commendation to be provided to DOE from the ER Committee regarding the SRS Environmental Remediation Program 2000 accomplishments (see attachment).

Gail Mitchell, EPA, provided a presentation regarding Total Maximum Daily Load (see attachment). Ms. Mitchell stated that Total Maximum Daily Load (TMDL) is the total amount of pollutant a waterbody can assimilate and still meet the applicable water quality standard. The Savannah River Mercury TMDL was originally proposed in February 2000 and must be finalized by February 28, 2001 by court order. Work done on TMDL shows the predominant damage to the watershed is from atmospheric deposition of mercury, a persistent biochemical toxicant and the cumulative coming from .. Therefore, reducing point sources will not fix the problem, she said. A national fish advisory recommends that pregnant women, nursing mothers and small children not eat any swordfish, king mackrel or shark since mercury can impact fetal development causing learning disabilities and neurological damage in children.

Ms. Mitchell discussed the EPA approach to the TMDL stating they had used the final risk based calculations for health, but needed more data to come up with a target. So in June, 2000, the field division collected data from 16 sites in the Savannah River basin (water, fish tissue, and sediment). Water concentrations in the river were low but data from fish showed most fish had mercury above the 0.23 ppm level (an average of 0.4) which established a target. EPA modelers then used a watershed model and a WASP 5 model to show water moving downstream. Forty percent of mercury came from medical incinerators that are being phased out. The air program was able to conclude, based on this analysis, that

by 2010 mercury will be greatly reduced. The final TMDL produced on February 28 is designed as a phased approach. NPDES facilities in GA without an existing permit limit for mercury will be given an option to meet the requirement of 2.8 parts per trillion or agree to monitor and implement a reduction plan. This gives the option to continue discharging at current levels. Facilities discharging directly to Savannah River from SC must meet water quality targets at the mid-point of the river, said Mitchell. EPA is looking to SC to define what they would expect in a mercury minimization effort. The TMDL will be revised in 2006.

Bill Payne, WSRC stated that impacts to SRS are unknown at this point. SRS will conduct a costly mercury minimization plan and additional treatment of several outfalls may be required in the future. Depending on the requirements set forth in 2006, thirty discharge points could be impacted, even requiring new treatment facilities.

Point of compliance could be major issue for SC dischargers, he said. That depends on how the state line is applied to NPDES limits. It will eventually impact many other companies and ultimately SC will develop their own TMDL for mercury.

Board members questioned why if 99% of the mercury comes from air emissions, is EPA concerned with the one percent NPDES contribution. Discussion also addressed the need for the Savannah River to be on the impaired waters list; the jurisdictional problem of where the river is divided and the impacts of bird migration from ponds and lakes.

Maria Reichmanis presented a letter from the ER committee regarding their comments on the TMDL. (see attachment).

Savannah River History Project

Mary Beth Reed, public historian with Newsouth in Stone Mountain GA. provided an overview of the Savannah River History Project. With buildings reaching the end of their life cycle and the window of opportunity narrowing to talk with people with first hand knowledge of early SRS history, DOE commissioned the project to preserve artifacts and honor the heritage of the cold war legacy. Ms. Reed discussed building architecture and showed pictures dating back to the early 1950s. She discussed the history of SRS and included personalized information such as stories about the Construction Manager and his family. She also discussed the impact of SRS to the local community, its housing, water and sewer and the fact that SRS brought in a two-party political system. Ms. Reed stated the History Project includes a book by four authors that will be released in June.

Strategic & Long Term Issues Committee Report

Mel Galin noted the first meeting of the Stewardship Subcommittee and the fact that it was held by videoconference, which worked well. He announced that PK Smith will lead the Stewardship Committee and Jean Sulc, vice chair, noting the committee will deal with long term stewardship issues of interest to the entire DOE complex. The first meeting was directed toward setting objectives and standards. Another meeting is tentatively scheduled for March 8.

PK Smith presented the SSAB Stewardship recommendations (see attachment). She said the only comments she received regarded the funding section, which was a show stopper for Tom Costikyan. Mr. Costikyan said he thought it was naïve to think that funding would be managed outside the federal program. Following extensive discussion the Board voted not to support the funding portion of the statements by a vote of 14 to eight. However, the Board did acknowledge Karen Patterson was approved to represent them during the upcoming SSAB Chairs meeting and could hopefully find a way working by consensus to address Board concerns regarding the funding statement. The Board agreed to all other aspects of the statements.

SRS Prioritization Process

Shayne Farrell, DOE, provided a presentation regarding the SRS Prioritization Process (see attachment). Mr. Farrell explained how a prioritization process team has been working to seek improvements to the process that will enhance SRS ability to reduce risk and accomplish critical work. The strengths of the existing process are stakeholder involvement and awareness and the fact that it has been in use for six years. It uses the traditional risk definition of risk= consequence x probability and is a weighted process used to determine which activities are funded at SRS.

Mr. Farrell discussed issues raised with the existing process by the Consortium for Risk Evaluation with Stakeholder Participation and others noting that the system wasn't transparent or understandable. The process appeared to be a list of activities versus recognizable problems. Therefore, a team was organized to improve the process. Mr. Farrell discussed the activities of the team, which reviewed SRS and other processes and then developed process improvement recommendations. They also defined criteria, consequences and probabilities and developed weightings. Mr. Farrell discussed the differences in the existing process versus the proposed process and announced that DOE would like to propose holding a workshop in March to provide a hands-on demonstration of the project. He requested that CAB members who were interested in participating in the workshop contact DOE or WSRC.

Transportation & Packaging

Ken Stephens, WSRC, provided a presentation regarding Radioactive Material Transportation and Packaging at SRS (see attachment). He discussed transportation safety, key organizations, onsite packaging and transportation, shipping and packaging to support SRS missions and initiatives at SRS. Mr. Stephens stated there are three million radioactive shipments annually in the U.S. and DOE shipments make up less than one percent of the total, making 5000 DOE shipments annually. Mr. Stephens discussed Department of Transportation regulations of all hazardous materials in commerce noting that no fatality has occurred from radioactive cargo in over 50 years. He discussed the rigorous testing of Type B packages used to transport high radioactivity including dropping canisters from 30 feet onto a concrete surface, crushing, punctures, subjecting the canisters to heat up to 1400 degrees for 30 minutes and immersion in water.

Onsite SRS packaging is DOT-certified or meets equivalent safety standards approved by DOE-SR. SRS uses about 40 different package designs, ranging from small sample carriers, to 90-ton casks. Mr. Stephens discussed the various shipping required to support SRS missions including nuclear material and environmental stewardship. He discussed the 9975 packaged developed at SRS and the Trupact II Type B TRU Package. SRS is preparing for the growing number and type of shipments by teaming with other sites and national programs and performing Type B package development, he said. In May 2000, WSRC established the Radioactive Material Transportation Program to integrate packaging, transportation and user functions; to improve packaging planning, development and procurement; and to optimize procedures, training, and organizational structure. Mr. Stephens summarized by stating that radioactive material packaging and transportation is strictly regulated through DOE and NRC regulations and DOE Orders. Safety is achieved through understanding contents, selection of robust packaging and using clear marking, he said. Mr. Stephens emphasized that packages undergo rigorous reviews and how new missions will increase the number of shipments. SRS is pursuing ways to manage the transportation program even better than in the past, he concluded.

Administrative Committee Report

Administrative Committee Chair Beaurine Wilkins conducted annual membership elections. The following individuals were elected to two-year terms in 2001-2002:

David Adcock, Columbia, SC
Meryl Alalof, Martinez, GA

Ken Goad, Aiken, SC
Vera Jordan, Augusta, GA

Walter Becker, Hilton Head, SC
Nancy Ann Ciehanski, Bluffton, SC
Beckie Dawson, Savannah, GA
Gerald Devitt, Aiken, SC
Mel Galin, Savannah, GA

J.G. Long, Martinez, GA
Jimmy Mackey, Beaufort, SC
Murray Riley, Aiken, SC
Heather Simmons, Allendale, SC
Bill Vogeles, Savannah, GA

Beaurine Wilkins also conducted committee chair elections. The following members were elected Committee Chairs to serve for 2001:

Administrative Committee	Lola Richardson
Education Committee	Jean Sulc
Environmental Remediation Committee	Jimmy Mackey
Nuclear Materials Committee	Ken Goad
Strategic & Long Term Issues Committee	Mel Galin
Waste Management Committee	Wade Waters

Public Comments

Brendolyn Jenkins provided personal comments that the History of Savannah River Project is absent of adequate African American representation. She stated she was very offended by the project brochure.

Murray Riley provided personal comments that he was offended that the mugs commemorating the 50th Anniversary of SRS were made in China. He stated he is all-American and always purchases American-made products.

The meeting adjourned at 4:45 p.m. with Tom Heenan acting as Deputy Designated Federal Official.

Handouts

January 23, 2001 Meeting Agenda
Operations Update, dated January 2001
SRS CAB Recommendation Summary
Nuclear Materials Stabilization Activities at SRS, Chuck Keilers, DNFSB
Nuclear Material Stabilization Program, Sachiko McAlhany, DOE
High Level Waste Program Update, Larry Ling, DOE
High Level Waste Tank Annulus Cleaning, Wade Waters, CAB
Technology Investigation for PUREX Treatment and Incineration, Perry Holcomb, CAB
Draft Letter from SRS CAB to Greg Rudy, dated January 23, 2001
Savannah River Mercury TMDL, Gail Mitchell, EPA
Letter from SRS CAB to EPA, dated January 22, 2001
Recommendation on Long Term Stewardship, PK Smith
SRS Prioritization Process, Shayne Farrell, DOE
Radioactive Material Transportation & Packaging, Ken Sephens, WSRC
SRS CAB Activity Calendar
NEPA EIS Report

For copies of meeting handouts call 1-800-249-8155.