



## SRS Citizen's Advisory Board

### January 1999 Meeting Minutes

#### **SRS Citizens Advisory Board**

January 26, 1999 8:30 a.m.  
Hilton Resort  
Hilton Head, S.C.

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#### **Members Present**

Bill Adams	Kathryn May	<u>Ex-Officio Representatives</u>
Arthur Belge	Barbara Murphy	Tom Heenan
Tom Costikyan	Lane Parker	Ann Clark
Mary Elfner	Karen Patterson	Julie Corkran
Ken Goad	Maria Reichmanis	Jim Brownlow (alternative)
Brendolyn Jenkins	Lola Richardson	
Bill Lawless	Ed Tant	
Ann Loadholt	Wade Waters	
Jimmy Mackey	Becky Witter	

Members absent were Bill Donaldson, P.K. Smith and Beaurine Wilkins. Currently, there are four Board vacancies. The Department of Energy (DOE) Designated Federal Official present was Tom Heenan. 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.

#### **Key Decisions Made by the Board**

A unanimous decision to support the preferred alternative selection of melt and dilute technology in the SRS Spent Nuclear Fuel Draft EIS was adopted by the Board, which recommended DOE follow its current course of action and provide regular updates to the CAB.

A recommendation questioning the need for corrective measures for groundwater remediation at the Southwest Groundwater Plume at the Old Burial Ground Complex was adopted. It supported three of five interim corrective measures planned and will be accompanied by a minority report.

The Board adopted a recommendation commending the three agencies for bringing the Plug-In-Record of Decision concept to a reality. The recommended implementation of the approach at the candidate units and requested a list of additional units for the approach.

The SRS CAB objects to the New Mexico Environmental Department (NMED) having any regulatory authority over SRS operations and emphasized that NMED should only be allowed to regulated mixed-Tru waste in a recommendation regarding a Hazardous Waste Permit to be issued to the Waste Isolation Pilot Plant.

The Board adopted a recommendation to cancel the High Level Waste Tank Closure Environmental Impact Statement unless by March 1999, DOE identifies worker safety, public health and environmental

protection issues. In the event that EIS preparation continues, the CAB recommends that minimum funds be devoted and that the EIS be completed by the end of December 1999.

All Subcommittee Chairpersons were re-elected to their current positions with two exceptions. Jimmy Mackey will serve as Budget Subcommittee Chair and P.K. Smith and Wade Waters will Co-Chair the Risk Management & Future Use Subcommittee.

### **Approval of the Minutes**

The November 1998 meeting minutes were approved with two modifications.

### **Agency Update**

Ann Clark of the South Carolina Department of Health and Environmental Control (SCDHEC) announced that Brad Wyche, an environmental attorney from Greenville, S.C. is the new SCDHEC Board Chairman. She also mentioned increased public involvement efforts in enforcement actions and announced the upcoming Centers for Disease Control Citizens Board meeting to be held on February 4-5 in Savannah, Ga.

Julie Corkran of the Environmental Protection Agency (EPA) stated that EPA is planning to file with DOE a minor modification to the Federal Facility Agreement that impacts the community relations plan. She noted the success of the community involvement program at SRS versus private industry and stated that the SRS Public Involvement Plan could be a more useful tool that dovetails nicely with the work of the Risk Working Group Team B and the Outreach Subcommittee.

Tom Heenan of DOE provided the Operations Update and a status report on several Environmental Remediation Projects (see attached). He highlighted the transuranic drum retrieval program and noted the CAB's contributions to its progress. He also announced that the DOE budget rollout and videoconference would be held on February 1 at Aiken Technical College. Mr. Heenan noted several DOE senior management positions that were recently filled. Charlie Hanson will manage the Nuclear Materials Division and Roy Schepins will manage the High Level Waste Division. He also noted that Jon Wilczynski transferred from Idaho to DOE-Headquarters EM Office and regrettably announced that Vic Stello recently passed away.

### **Public Comments**

Lane Parker stated concern regarding getting remediation field work started. He noted a full page ad in the Augusta Chronicle that emphasizes all the money SRS is saving and the fact that managers received \$33 million in reward. He stated that all the Operating Engineers Local 470 wants is for its workers to get eight hours pay for an eight hour day and not have to worry about layoffs. Bill Lawless shared Mr. Parker's concern, particularly as it relates to the SRL Seepage Basins. Tom Heenan noted the process can be frustrating however SRS has made remarkable progress. Julie Corkran echoed Mr. Heenan stating that SRS is "heads above the rest." She also remarked that EPA is wholly committed to maintaining and increasing funding for the ER Program.

### **Facilitator Update**

Mike Schoener provided a summary of the SRS CAB Process Retreat held January 8-9, 1999 in Charleston, S.C. (see attached). He discussed an action item hit list noting some of the improvements discussed at the retreat. A follow-up session to discuss the restructuring of subcommittees was held on Monday, January 25 and the following organization recommendations were made:

- Have two-issues based subcommittees

- Environmental Remediation (ER and the Federal Facility Agreement)
- Waste Management/Materials Management (nuclear materials, waste management, transportation)
- Form formal ad hoc committees for any issues that do not fall under two subcommittee above
- Utilize the Budget Subcommittee to review the SRS Budget Process annually
- Combine the Outreach and Administrative Subcommittees

Mr. Schoener stated a follow-up meeting would be held in May to discuss organizational structure changes and that changes will be finalized in July and implemented in January 2000. No bylaws changes are required for the above restructuring. Mr. Schoener also noted an upcoming transportation seminar to be held in May in Cincinnati, Ohio. The Fernald Site Specific Advisory Board is hosting this meeting and more information will be available in March.

Mr. Shoener also provided a recommendation status report. He noted that Recommendations 67, 68 and 72 are still pending response from the agencies. He also noted that there are 35 recommendations still open that may require action and that he will work with subcommittee chairs to determine those that might be closed.

### **Nuclear Materials Management Subcommittee Report**

Subcommittee Chair Tom Costikyan introduced Karl Waltzer of DOE-SR to provide a presentation (see attached) on the SRS Spent Nuclear Fuel Draft Environmental Impact Statement (EIS). Mr. Waltzer discussed the proposed action, which is to develop and implement a safe and efficient spent nuclear fuel management strategy that includes preparing aluminum-based spent fuel and other failed, decayed or powdered fuel for ultimate disposition. The Draft EIS is being used to select a new non-chemical processing technology for this program. Decisions to be made include the treatment technology and construction required with any new or existing facilities. Mr. Waltzer discussed the various spent nuclear fuels evaluated in the EIS; the various technologies being considered; alternatives available; and the preferred alternative (a combination of the technologies primarily utilizing the "melt and dilute" technology).

The SRS Spent Nuclear Fuel Draft EIS was issued in December 1998. The public comment period closes February 8 and a Final EIS is expected in March/April 1999 with a Record of Decision available in April/May 1999. Board members were interested in the melt and dilute technology which will be piloted next year on 10-12 spent fuel rods and then scaled up to industrialization size. Tom Costikyan noted that the National Academy of Sciences (NAS) had noted that this technology is well understood and has been used since the 1960s. From a technical standpoint, this was considered to be one of the most viable technology by the National Academy of Sciences, he said. Mr. Costikyan noted the NAS had also recommended chemical processing as a viable alternative. Board members questioned off-gas potential from the melt and dilute technology as well as waste generation. Mr. Waltzer stated that off gas collection filters would be required and probably disposed through the Defense Waste Processing Facility. Waste generation is being evaluated as part of the EIS, he said.

Mr. Ed Fei of DOE-Headquarters provided a presentation on nonproliferation impacts for managing spent fuel (see attached). Mr. Fei noted that he had been working in nonproliferation (preventing further spread of nuclear weapons) for ten years. He engages in discussion with various foreign governments regarding their fuel cycles. Mr. Fei noted the authors of the Nonproliferation Impacts Assessment stating that any options in the SRS Spent Nuclear Fuel Draft EIS are acceptable to the nonproliferation community. He stated he was pleased to see the melt and dilute technology chosen as the preferred alternative and discussed issues with reprocessing and why it is a concern.

Mr. Fei noted the U.S. policy not to reprocess is embedded in U.S. law. He then stated that now twenty years later, countries that continued reprocessing were now coming back to the U.S. and acknowledging the U.S. was right to end reprocessing. Mr. Fei noted that Switzerland, an independent country, is

probably taking the best approach of putting its materials in long-term monitored retrievable storage and then "waiting to see" what technologies are developed over the next 30-40 years for ultimate disposition. Bill Lawless took exception to Mr. Fei's comments regarding reprocessing noting Germany and Russia as examples of two countries reprocessing their materials. He also noted that Defense Nuclear Facilities Safety Board Chair John Conway urges DOE to make every effort not to shut down the canyons.

**Tom Costikyan read the subcommittee's motion regarding the SRS Spent Fuel Draft EIS (see attached). The motion supported the preferred alternative selection of melt and dilute technology and recommended DOE follow its current course of action and provide regular updates to the SRS CAB. Bill Lawless moved the Board accept the motion and Lane Parker seconded. The Board voted unanimously in favor of adopting the motion. [Recommendation #74](#)**

### **Environmental Restoration Program**

Tom Heenan, DOE Assistant Manager for Environmental Programs provided a presentation on Innovative Technologies in the SRS Environmental Remediation Program (see attached). Of 477 waste sites identified at SRS, 244 have been remedied or are in the remedial design phase. Three hundred of 500 acres have been cleaned up or are currently in remediation, six of eleven groundwater contamination areas have remediation systems running and over three billion gallons of contaminated groundwater have been treated. Mr. Heenan discussed the ER Program by areas at SRS. In the A/M Area, the zone of contamination is wide. Mr. Heenan discussed airstripping, soil vapor extraction units, Baroballä technology and the recirculation well technology in this area. He also discussed a particularly difficult problem encountered in dense nonaqueous phased liquids or DNAPL in this area and the technologies being used and researched to address this problem.

Mr. Heenan discussed geosynthetic capping at the Nonradioactive Waste Disposal Facility and horizontal well technology being used to enhance bioremediation in this area. In the TNX and D Areas, Mr. Heenan noted drum removal at the D Area Oil Seepage Basin and GeoSiphon Iron Treatment. Mr. Heenan discussed groundwater cleanup in F and H Areas and provided an update on the Old F Seepage Basin. An update was also provided on activities at the Burial Ground Complex and Reactor areas, all of which contain predominantly radioactive contamination. Board members thanked Mr. Heenan noting how impressed they were with his use of advanced presentation technology.

### **Environmental Remediation & Waste Management Subcommittee Report**

#### **A/M Area Groundwater Update**

Mike Simmons of DOE provided an update (see attached) on groundwater contamination in the A/M Area. Tetrachloroethylene (PCE) has been detected in three wells near the Site boundary with calculated concentrations for PCE significantly above groundwater standards. He stated that there are various potential sources for this contamination and that he was here to provide timely notification and inform the board of the actions being taken to fully address the situation, including communications with stakeholders. Flyers have been mailed to area residents, the City of Jackson wells have been sampled and one offsite residential well located was sampled as well, he said. Well drilling began in January to install monitoring wells and a soil gas survey should be completed shortly. Board members commented that they appreciated such timely and early notification since all data has not been analyzed. It was noted that such public notifications may not have been made even less than a decade ago, sending a signal that DOE wants to keep its stakeholders informed.

**MWMF Groundwater: Interim Measures Plan for Burial Ground Complex Southwest Groundwater Plume**  
Ed McNamee of Bechtel provided a briefing (see attached) on the interim corrective measures planned at the Burial Ground Southwest Groundwater Plume. These measures are proposed to reduce the discharge of tritium into Four Mile Branch until a long term plan is implemented. Mr. McNamee provided a history and background regarding groundwater contamination in the area and presented concentrations of contamination at the seepline. The interim measure includes surface drainage enhancements;

modifications to the engineered ditch; flow restrictions along the Old F Effluent Stream; recirculation wells to address volatile organic compounds; passive VOC remediation and a surface water monitoring plan.

Karen Patterson provided an explanation of tritium and tritium concentrations resulting from this groundwater plume, noting that concentrations decline with time and distance (see attached). **She then presented a draft motion questioning the need for corrective measures at the Four Mile Branch since tritium concentrations are declining in this stream as well as the Savannah River (see attached). The motion supported surface drainage enhancements, posting of signs and restriction of access and increases to the monitoring program. However, it request the agencies present to the CAB its data and their rationale along with groundwater modeling results that demonstrates the corrective measures will decrease tritium concentrations at the seepline by significant amounts. Bill Lawless moved the Board accept the motion and Ken Goad seconded.**

[Recommendation #75](#) Shelley Phipps of SCDHEC presented the rationale of her agency, stating that DOE-SR had proposed a set of actions which are simple to implement and that would reduce the amount of tritium to all receptors.

Following much discussion, Brendolyn Jenkins moved to table the motion. Six members were in favor, eleven opposed and Lane Parker abstained due to potential conflicts of interest. **The original draft motion passed with ten members in favor, seven opposed and Lane Parker abstaining. It was determined that a minority report would accompany this recommendation.**

#### Plug-In Records of Decision

Phil Prater of DOE provided a presentation on Plug-in Records of Decisions (see attached). Using a Plug-In-ROD streamlines process by applying a common remedy to operable units that exhibit common characteristics. Four units consisting of eight radionuclide-contaminated reactor seepage basins have been identified for the first Plug-In ROD remedy, which is insitu stabilization with a low permeability soil cover. Mr. Prater discussed the benefits of the Plug-in ROD approach and the anticipated schedule for remediation of the eight seepage basins. **Lane Parker presented a draft motion commending the three agencies for bringing this previously endorsed concept to a reality; recommending implementation of the approach at the candidate units and requesting a list of additional units that meet the specified criteria (see attached). Becky Witter moved the Board accept the motion and Bill Lawless seconded. The motion passed with 17 members in favor and one abstention from Lane Parker due to potential conflicts of interest. [Recommendation #76](#)**

#### Transuranic Waste Shipments to the Waste Isolation Pilot Plant

Sonny Goldston of British Nuclear Fuels Ltd. provided an update (see attached) on plans to ship transuranic waste to the Waste Isolation Pilot Plant (WIPP) and a permit required by the Resource Conservation and Recovery Act (RCRA). Mr. Goldston discussed the status of SRS programs and equipment and discussed the schedule for shipping transuranic waste to WIPP. He also discussed the status of WIPP and that NMED has issued a draft Hazardous Waste Facility RCRA Permit. The first draft of this permit was issued in May 1998 and a second was issued in November and is currently undergoing public comment. **Wade Waters presented a draft motion that provides comments on the draft RCRA permit (see attached). The motion objected to the New Mexico Environmental Department (NMED) having any regulatory authority over SRS operations and emphasized that NMED should only be allowed to regulated mixed-TRU waste. Bill Lawless moved the Board accept the motion and Jimmy Mackey seconded. The motion was adopted by a unanimous vote. [Recommendation #77](#)**

#### High Level Waste Tank Closure Environmental Impact Statement (EIS)

Larry Ling of DOE provided a presentation on plans to conduct a high level waste tank closure Environmental Impact Statement (see attached). He provided a background of the SRS high level waste program and tank closure history and discussed the need for an EIS. Mr. Ling stated an EIS is being conducted to maintain a consistent approach with other DOE sites, to open a new round of information sharing and dialogue and to incorporate issues and concerns from two national workshops. He also remarked that this is a convenient time to conduct the EIS since funding is unavailable for tank closure and the EIS will provide documentation if tank closures are questioned in the future.

Ken Goad presented the draft motion to cancel the EIS unless by March 1999, DOE identifies worker safety, public health and environmental protection issues. In the event that EIS preparation continues, the motion recommends that minimum funds be devoted and that the EIS be completed by the end of December 1999. Bill Lawless moved the Board accept the motion and Brendolyn Jenkins seconded. Board members discussed drivers for the EIS and the political pressure to conduct the EIS. The motion carried with 14 members in favor, two opposed and two abstentions. [Recommendation #78](#)

### **Public Comment**

#### **Bob Newman, Fripp Island, S.C.**

Mr. Newman requested information regarding the highest concentration of contamination in potable water at SRS stating that the public is often worried over and the workers forgotten. Mr. Newman commented on an earlier presentation and strong statements made regarding plutonium. He noted the SRS CAB Education Forum held in 1997 regarding this issue and stated he was a founder of the Barnwell Nuclear Fuel Plant and that Jimmy Carter had shut down the facility due to the nonproliferation policy. He stated other countries are making weapons-grade plutonium and nonproliferation should not stop the U.S.

#### **George Sawyer, Savannah, Ga.**

Mr. Sawyer requested follow-up information on request made in a previous meeting regarding transportation.

### **Risk Management & Future Use Subcommittee Report**

Wade Waters provided a summary of subcommittee activities. The Comprehensive Plan is due on March 1, 1999. A status of the Risk Working Group will be provided in March and the Subcommittee plans to submit a letter regarding DOE-Headquarters response to CAB Recommendation 58.

### **Administrative Subcommittee Report**

Lane Parker conducted subcommittee chair elections. The following individuals will serve in 1999: All current subcommittee chairs were re-elected to their current positions with two exceptions. Jimmy Mackey will serve as Budget Subcommittee Chair and P.K. Smith and Wade Waters will co-chair the Risk Management & Future Use Subcommittee.

Mr. Parker also presented candidates for 1999 membership. Forty-five individuals are running for 15 vacant positions. Several candidates were present and introduced themselves to the CAB.

### **Outreach Subcommittee Report**

Lane Parker presented a final draft of the third issue of the "Board Beat." He also encouraged members to provide information on community/civic organizations for which the CAB could provide speakers.

### **Technology Deployment/Oak Ridge Trip Report**

Wade Waters provided a trip report on a Southeastern Technology Deployment Workshop (see attached). He discussed the importance of streamlining the regulatory process and providing demonstrations in one location and making information available across the complex. Jimmy Mackey briefed the Board on a visit to an Oak Ridge Site Specific Advisory Board meeting noting the Board's hospitality and the benefits derived from the visit.

### **TNX Tour/Early Warning Monitoring System**

Mary Elfner commented on a tour held in September 1998 of the TNX area stating it was very helpful. She also discussed an early warning monitoring system where the City of Savannah takes samples from the Savannah River daily at the Highway 301 Bridge. She read a letter from City Manager, Michael Brown to Greg Rudy, DOE-SR Manager that referred to tritium releases in 1986 and 1991 and how the spills were costly to their customers. The letter stated that confidence must be provided and all stakeholders need to be assured their water is safe. Ms. Elfner noted the healthy debate over safe levels and stated that with increasing surface water usage (mandated to reduce groundwater usage due to salt intrusion), public confidence is essential.

### **Administrative Items**

Bill Lawless will attend the WIPP Hazardous Permit Hearing in Santa Fe, NM on February 22, 1999.

### **Handouts**

DOE News Release, dated Dec. 22, 1998  
Operations Update, January 1999, Tom Heenan, DOE  
SRS CAB Process Retreat Summary, Schoener  
Savannah River Site Spent Nuclear Fuel EIS, Karl Waltzer, DOE-SR  
SRS Spent Nuclear Fuel Management EIS Preferred Alternative Management Flow Path, Karl Waltzer, DOE  
Options for Managing SRS Aluminum-Based Spent Nuclear Fuel, Ed Fei, DOE-HQ  
News Release, The White House, Office of the Press Secretary  
42 USC 2158 Conduct Resulting in Termination of Nuclear Exports, Ed Fei, DOE-HQ  
SRS Environmental Restoration, Thomas Heenan, DOE-SR  
A/M Groundwater Update, Mike Simmons, DOE-SR  
MWMF Groundwater, McNamee, Bechtel  
Tritium, Patterson, CAB  
Motion: Interim Corrective Measures Southwest Plume, Patterson, CAB  
Plug-In-ROD Status Update, Phil Prater, DOE  
Motion: Plug In ROD, Lane Parker, CAB  
Transuranic Waste Ship to WIPP, Sonny Goldston, BNFL  
WIPP RCRA Permit-Motion Summary, Wade Waters, CAB  
SRS High Level Waste Tank Closure EIS, Larry Ling, DOE-SR  
Motion: High Level Waste Tank Closure EIS, Goad, CAB  
"Board Beat" Final Draft, Lane Parker, CAB  
S.E. Regional Technology Deployment Workshop, Wade Waters, CAB  
Monthly NEPA Report  
1999 SRS CAB Activity Calendar  
Letter from Greg Rudy, DOE-SR to Ann Loadholt, dated Dec. 8, 1998  
Letter from Greg Rudy, DOE-SR to Ann Loadholt, dated Jan. 11, 1999  
SRS CAB Recommendation Summary  
Tritium, The Monster Under the Bed, Editorial, Tom Costikyan, CAB  
Environmental Management Site Specific Advisory Board Administrative Procedures Survey Results

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SRS Citizens Advisory Board  
Special Session-Restructuring Subcommittees  
Monday, January 25, 1999  
Hilton Head Island, S.C.

A special meeting was held to discuss potential restructuring of the SRS Citizens Advisory Board Subcommittees on Monday, January 25, 1999 at 3 p.m. at the Holiday Inn, Hilton Head Island, S.C. The following Board members were in attendance

Bill Adams	Lane Parker	Wade Waters
Tom Costikyan	Karen Patterson	Ann Clark (SCDHEC)
Ann Loadholt	Maria Reichmanis	Julie Corkran (EPA)
Jimmy Mackey	Ed Tant	

Board Facilitator Mike Schoener conducted the meeting. Board Administrator Dawn Haygood and Mary Flora also attended.

Mike Schoener initiated the meeting with discussion of a new subcommittee structure that had been introduced at the SRS CAB Process Retreat held January 8-9, 1999, in Charleston, S.C. A team of members had suggested that the Board's issues-based subcommittees be restructured in the following manner:

<u>ER&amp;RM</u>	<u>WM&amp;EM</u>	<u>Future Use &amp; Planning</u>
Federal Facility Agreement	Nuclear Materials	Land Use
Environmental Cleanup	Transportation	Decontamination/
Risk Management for ER	Waste Management	Decommissioning
	EM Integration	Budget

For clarification it was noted that risk management under the ER&RM Subcommittee referred to risk assessments as they applied to ER work. It was also noted that Waste Management and EM Integration were a good fit and suggested as a second issues-based subcommittee to assist with the overload of the current ER&WM Subcommittee. This would provide for better distribution of work and better focus on SRS CAB-chartered activities, which is to advise DOE on environmental remediation and waste management decisions.

Wade Waters commented that transportation of hazardous waste is one of the great issues faced by the Board. He suggested this issue needs a devoted subcommittee. Lane Parker commented that transportation crosscuts all the subcommittee work however, the Board is trying to streamline efforts.

Board members also discussed risk management as a crosscutting issue. Ann Clark suggested that a subcommittee entitled "Cleanup" might better characterize its function. Wade Waters commented that there is such emphasis on risk that it will be kept in the "back of everyone's mind" as they discuss issues in any subcommittee. One Board member asked what is not working with the current set up and why restructuring was necessary. Julie Corkran, EPA noted the potential for the Board to utilize regulator resources more effectively with the proposed restructuring. It was also noted that the restructuring would provide for a better distribution among SRS CAB members and focus and improve Board participation. It was noted that new member orientation should also focus more on subcommittee work to improve participation.

Ann Loadholt questioned if the Board should consider combining the Administrative and Outreach Subcommittees in an effort to streamline operations. It was noted that for the most part, the same members participate on both committees. It was also suggested that the Budget Subcommittee, which currently has a very limited function, could be utilized to review the SRS Budget annually.

It was suggested that two issues-based subcommittees could suffice- Environmental Remediation and Materials Management. The Budget Subcommittee could pick up the annual review of the SRS Budget and the Paths to Closure document. Any other issues could be addressed by forming ad-hoc committees.

Another session to discuss the restructuring of Board committees will be held in conjunction with the May Board meeting in Savannah, Ga.