



## SRS Citizen's Advisory Board

### October 2001 Meeting Minutes

#### SRS Citizens Advisory Board

October 22-23, 2001  
Sheraton Augusta Hotel  
Augusta, GA

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#### Members Present

David Adcock

Meryl Alalof

Nancy Ann Ciehanski

Beckie Gaston-Dawson

Gerald Devitt

Mel Galin

Ken Goad

Perry Holcomb

Brendolyn Jenkins

William Lawrence

J.G. Long

Jimmy Mackey

Karen Patterson

Maria Reichmanis

Lola Richardson

Murray Riley

Heather Simmons

Marty Stringer

Jean Sulc

Carolyne Williams

William Willoughby

#### Ex-Officio Representatives

Keith Collinsworth, SCDHEC

Tom Heenan, DOE

Camilla Warren, EPA

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

Savannah River Site (SRS) Citizens Advisory Board (CAB) members Sallie Connah, Vera Jordan, and Bill Vogele were unable to attend. 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. The Board voted by a 2/3 majority to amend the October 23 agenda to add two agenda items regarding compaction of low level wastes and the SRS Annual Environmental Monitoring Report.

#### Approval of the Minutes

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

#### Key Decisions Made During the Meeting

##### **Recommendation 143- Operating Strategy Studies for the Solid Waste System Plan**

The SRS CAB recommended that SRS prepare additional operating strategy and cost studies regarding long-term disposal of non-compacted waste and specifically requested that the site:

- Investigate alternatives to the B-25 disposal containers, which includes the possibility of direct shallow-land burial of appropriate low activity, low level wastes.
- Investigate alternatives to reduce subsidence repair costs.
- Evaluate alternative capping strategies.

- Evaluate alternatives to optimize land utilization.
- Provide the long-term public health and environmental impacts for each strategy.

#### **Recommendation 144- Scrap Metals Programmatic Environmental Impact Statement**

The SRS CAB offered the following recommendations to help DOE determine the alternatives, issues and environmental impacts to be analyzed by the Scrap Metals PEIS:

- Convey to the general public the various alternatives in language that is clear and easy to understand.
- Include the expected inventory of all scrap metal and the financial impacts of implementing each alternative including disposal cost, expected income from recycling, costs for detection methodology, processing costs, record maintenance, etc.
- Identify the industry/government standard it would consider using in Alternative #2. Provide a rationale for choosing that standard realizing that a zero level of radioactivity can never be achieved.
- Address the anticipated public involvement and communications program in the PEIS.
- Identify the short-term health effects to site workers, off-site workers, and the general public for each alternative under consideration.
- Identify the long-term (10,000 years) health and environmental impacts of metal compounds expected from the degradation of scrap metal exposed to the elements and potential landfill leachate.

#### **Recommendation 145- Groundwater Mixing Zones**

The SRS CAB applauds the regulatory agencies (SCDHEC & EPA) and the SRS in the prudent use of groundwater modeling technology and vadose zone containment migration software and requested that the three agencies finalize a streamlined protocol, analogous to the Plug-In ROD concept, on mixing zone applications. They asked the three agencies to provide a plan of action and milestones for the protocol for presentation to the CAB by January 2002. The Board also requested that the three agencies continue to solicit stakeholder input (SRS CAB and the public) during the initial phases of remedy selection on any restoration site.

#### **Agency Update**

Camilla Warren of EPA announced that SRS CAB ex-officio member Julie Corkran recently wed. She also stated that EPA is participating in an Inspector General Audit of the DOE CERCLA cleanup program and will provide periodic updates to the Board.

Tom Heenan provided photographs of outgoing shipments of low-level, mixed and transuranic wastes from SRS and a photo of the first shipment of Mound transuranic waste accepted at SRS. He announced that site visits during a high level of security must be mission essential, however at the next lower level of security, mission related visits are allowed and CAB members may visit under this level of security. He commented that the Budget process remains the same and SRS is now under a continuing resolution until the end of October. In the meantime, WSRC is continuing to minimize discretionary expenditures, making progress, and is focused on commitments, he said. Mr. Heenan also noted a letter from Assistant Secretary Jessie Roberson to Karen Patterson regarding the top-to-bottom EM assessment and stated he and Greg Rudy will be at the combined committee meeting in November to provide more information. Mr. Heenan also provided the final operations update for fiscal year 2001 (see attached).

Dave Amerine, new WSRC Executive Vice President provided brief remarks regarding past experiences and what can happen when stakeholder confidence is lost. He noted the importance of sustaining

stakeholder confidence and provided observations of CAB committee meetings he has attended. He pledged to make himself available to support the CAB endeavor and thanked the Board for its efforts.

Keith Collinworth announced that James I. Palmer, Jr. was named the new EPA Regional Administrator and therefore Lewis Shaw, who had been a contender for the position, would remain with SCDHEC.

### **Facilitator Update**

Mike Schoener presented the current recommendation status report noting 23 recommendations are pending, 18 are open and 101 are closed. The Board is awaiting three responses from EPA, one from SCDHEC and one from DOE. There were no status changes in the recommendation database since the July meeting, he said. Mr. Schoener also provided an update regarding the SSAB Groundwater Workshop noting it was postponed until January 31 – February 2, 2002 at the Sheraton Augusta Hotel. Mr. Schoener also presented the results of the SRS CAB Self-Evaluation Survey for 2001. The Executive Committee will meet in January and determine if a process retreat is required to discuss survey results.

Mike Schoener explained the current procedure for leadership elections and the reasons for this structure. Currently, all interested members run for the Chair position and the winner is named Chair and the first runner up becomes Vice Chair. Mel Galin discussed reasons why he thought these two positions should be voted on separately. Mr. Galin cited history and other arguments noting the current method forces each member to accept a candidate they do not want and did not vote for. The Vice Chair will never be elected by majority but always by minority, he said. Following extensive discussion, Mel Galin moved that the chairperson of the CAB shall be elected from the members of the CAB by a majority of those voting for this office and the Vice Chair of the CAB shall be elected from the members of the CAB by a majority of those voting for this office. The motion failed following a split vote of 11 members in favor and opposed.

### **Waste Management Committee Report**

Subcommittee Chair Wade Waters provided a committee report noting the numerous offsite shipments and thanking Tom Heenan for his support and recognition of CAB involvement in these site accomplishments. He also noted the Salt Process Focus Group and the fact that he had previously announced the close of this group's function in October; however due to the delay in Salt Processing EIS, there may need to be discussion in January regarding the continuation of this focus group.

### **Consolidated Incineration Facility (CIF) Optimization Study**

Tony Maxted, BNFL, provided a presentation regarding the CIF Optimization Study (see attachment). Optimization of CIF is only one of several possible options for treating PUREX waste. Alternative technologies are also being developed to see if they can offer more cost-effective treatment. SRS must make a decision by April 1, 2002. The Optimization Study was conducted to establish whether or not it is possible to treat undiluted PUREX solvent at CIF and identify any hardware, program or operations modifications necessary. It also estimated the lifecycle cost of the operation of CIF under optimized conditions. Mr. Maxted discussed CIF upgrades costs, which total \$8,957K. He discussed operational costs and restart costs and noted total costs for running CIF to treat PUREX is \$51,832K. Mr. Maxted noted these costs are not going to be significant until the alternative options study is complete to provide a comparison. Board members questioned whether it would have been less costly to leave CIF in operation, treating all initial waste streams identified rather than eliminating those waste streams. Also, would newly generated PUREX be burned in CIF if in fact it were restarted? Mr. Maxted responded that it depends on costs. Board members also questioned if air emission and evaporator controls are part of the upgrades? Mr. Maxted responded that they are not part of upgrades because they are not necessary; however, the process to repermit and redemonstrate the technology is part of restart and this includes emission demonstration.

## **Effects of Eliminating Compaction of Job Control Waste**

Elmer Wilhite provided a presentation regarding super compaction of job control waste (see attachment). He discussed a previous CAB recommendation to evaluate whether waste compaction prior to trench disposal was needed. He noted that low level waste has been super compacted in the SRS Super Compaction Facility since June 1999. It was used to reduce vault utilization. A study looked at a variety of cases for long-term disposal costs. Mr. Wilhite discussed subsidence potential definition and the cost comparison between two best cases studied. The costs vary from \$35 to \$52 million. The study concluded that total life cycle costs are similar with or without super compaction. Super compactor costs are dominated by subsidence repair and B-25 boxes. Use of the super compactor combined with dynamic compaction provides two benefits over dynamic compaction alone: it reduces subsidence potential by an additional 7 inches and decreases required engineered trench area by 42 percent. A decision must be made whether to shut the super compactor down. If the decision is made to shut the super compactor down, then a transition plan must be implemented. DOE wants a decision by November.

Bill Willoughby presented the committee's draft motion regarding the operating strategy studies for the Solid Waste System Plan (see attachment). The SRS CAB recommends that DOE investigate alternatives to the B-25 disposal containers, investigate alternatives to reduce the subsidence repair costs; evaluate alternative capping strategies; evaluate alternatives to optimize land utilization; and provide a long term public health and environmental impacts for each strategy. Tom Heenan clarified that the motion referred to operating strategy for the super compactor for E Area trenches versus the overall Solid Waste System Plan. Bill Willoughby moved the Board adopts the draft motion and Murray Riley seconded. The motion was adopted by a unanimous vote.

## **Scrap Metal Programmatic Environmental Impact Statement**

Sonny Goldston, BNFL, provided a briefing of the Scrap Metal Programmatic Environmental Impact Statement (PEIS) (see attachment). DOE ceased recycling potentially contaminated scrap metals in 2000. As a result, DOE decided to initiate a PEIS to evaluate options for disposition of DOE scrap metals that may have residual surface radioactivity. It is designed to look at alternatives to the current suspension of recycling these metals. The alternatives are:

- No action-continue current suspension indefinitely
- Control the release of scrap metal from DOE radiological areas consistent with requirements in DOE Order 5400.5
- Control the release of scrap metals from DOE radiological areas consistent with alternative standards to DOE Order 5400.5
- No unrestricted release to scrap metal from DOE radiological areas unless there is clear knowledge, confirmed by monitoring that there is no potential for residual surface radioactivity

The scrap metals PEIS disposition paths under evaluation include unrestricted release for recycle, continued radiological control, restricted release and onsite storage and disposal. Mr. Goldston showed pictures of several examples of scrap metals.

Meryl Alalof presented the draft motion regarding the Scrap Metal PEIS (see attachment). The motion offered the following recommendations to help DOE determine the alternatives, issues and environmental impacts to be analyzed by the Scrap Metals PEIS:

- Convey to the general public the various alternatives in language that is clear and easy to understand.
- Include the expected inventory of all scrap metal and the financial impacts of implementing each alternative including disposal cost, expected income from recycling, costs for detection methodology, processing costs, record maintenance, etc.

- Identify the industry/government standard it would consider using in Alternative # 2. Provide a rationale for choosing that standard realizing that a zero level of radioactivity can never be achieved.
- Address the anticipated public involvement and communications program in the PEIS.
- Identify the short-term health effects to site workers, off-site workers, and the general public for each alternative under consideration.
- Identify the long-term (10,000 years) health and environmental impacts of metal compounds expected from the degradation of scrap metal exposed to the elements and potential landfill leachate.

Following several minor changes to the motion, Wade Waters moved the Board adopts the motion and Perry Holcomb seconded. Marty Stringer moved the Board amend the motion to recognize that zero contamination cannot be achieved. Bill Willoughby seconded the motion. The motion to amend passed by a vote of eighteen in favor, one opposed and two abstentions. The original motion passed by a vote of nineteen in favor and one abstention by Karen Patterson who noted her company might work on the PEIS.

### **Environmental Restoration Committee Report**

Gregory Rucker, WSRC, provided a presentation regarding Vadose Zone Contaminant Migration Software (see attachment). The software is deployed at SRS and is being sold globally on a commercial basis. It is used for all CERCLA documentation and vadose zone contaminant migration analyses performed by SRS or its subcontractors. It has been in effect since May 1999 and is considered "intellectual property" of WSRC. Mr. Rucker explained that the vadose zone is the subsurface geology extending from the land surface to the top of the water table. It is also called the unsaturated zone. The VZCOMML software performs technical analyses of the vadose zone, "if", "when" and "how much" contaminant from a waste unit will migrate to groundwater. It is consistent with EPA guidance and simultaneously calculates "clean-up" levels in soil. It can also evaluate "what if" scenarios for remedial actions. It gives us consistency in calculations, said Rucker. Mr. Rucker discussed the features of VZCOMML, the advantages of the software over other software, the real power of the software and soil screening. Mr. Rucker concluded noting the time and money saved by the VZCOMML software.

Jimmy Mackey presented a draft motion regarding groundwater mixing zones (see attachment). The motion applauds the regulatory agencies (SCDHEC & EPA) and the SRS in the prudent use of groundwater modeling technology and vadose zone containment migration software and requested that the three agencies finalize a streamlined protocol, analogous to the Plug-In ROD concept, on mixing zone applications. It asked the three agencies to provide a plan of action and milestones for the protocol for presentation to the CAB by January 2002. It also requested that the three agencies continue to solicit stakeholder input (SRS CAB and the public) during the initial phases of remedy selection on any restoration site. Wade Waters moved to accept and Bill Willoughby seconded. The motion was adopted by a unanimous vote.

### **Security at SRS**

Kevin Hall, Director, Office of Safeguards and Security provided a briefing on security at SRS (see attachment). The mission of the Office of Safeguards and Security Division is to protect against theft or diversion of classified and nuclear materials, government property, sabotage, espionage and hostile acts adversely impacting national security or the health and safety of employees, the public and the environment. Mr. Hall discussed threat guidance and protective force resource requirements. He discussed how threat assessments are rolled into the SRS safeguards and security planning process and how the site programs are tested, including force-on-force testing. Mr. Hall discussed the SRS facilities requiring protection and discussed Wackenhut Services, Inc., the protective forces at SRS, which employees 800 and operates under a \$70 million annual budget. Primarily, baseline protection resources consist of security officers, central alarm stations and security police officers. SRS is the only DOE facility

where the protective forces are law enforcement officers, accredited to perform patrol duties, detection and apprehension of criminal offenders and traffic control. Mr. Hall discussed helicopter support and the canine section of Wackenhut. Special response teams tactically respond to security emergencies and are trained in specialized weaponry and counterterrorism tactics. Explosive response capabilities are available as well as a chemical/biological response team. Mr. Hall discussed heightened security measurements post September 11, 2001, which include creating clear zones; additional rings of security, additional security posts and perimeter patrols, evaluation of all targets and increased communications with FBI, State and local law enforcement.

Board members questioned contingency planning, support from other agencies, the fate of Wackenhut canines, security force evaluations and foreign visitors. Kevin Hall addressed questions regarding the lack of restricted air space at SRS (which is a national issue), communications with other agencies, the various levels of security at SRS and the number of women in security forces.

### **Nuclear Materials Committee Report**

Ken Goad briefly discussed future topics of discussion for this committee and noted that Americium Curium would be transferred to the Waste Management Committee as it becomes a high level waste issue.

### **Strategic & Long Term Issues Committee Report**

Mel Galin commented that video conferencing or transfer of information among SSAB Chairs would be helpful. Mr. Galin also reported that the DOE-Headquarters Long-term Stewardship Office issued a request to comment on the process of developing the LTS document. Mr. Galin noted he is requesting an extension for comments from November 1 until November 7. He requested that any comments be submitted to PK Smith or Jim Moore. He also announced that a tour of the technology center would be held in the near future noting that previous tours scheduled had been canceled. He also discussed technology deployments, noting that 24 were presented the evening prior during committee and the CAB needed to be cognizant of SRS technology deployments and receive briefings when they are pertinent to CAB activities. Mr. Galin also discussed the 2002 budget and the fact that the CAB has not been receiving updates since no information has been available. Mr. Galin also announced that a report called *Economic Impacts of SRS on South Carolina and Georgia* is available.

### **Environmental Monitoring Annual Report**

Jim Heffner, WSRC, provided a presentation regarding the 2000 Environmental Monitoring Annual Report (see attachment). He discussed radioactive releases in calendar year 2000, trends, and radiation dose to public. The dominant release in air and water is tritium, which continues to decrease over the long term. A comprehensive sampling program includes 15,000 samples and 200,000 analyses per year. Mr. Heffner discussed the various sample types analyzed including water, fish, soil and wildlife. He discussed how sources for releases are being controlled to reduce the risk of accidental releases, through waste closures and stabilization of legacy materials. Stream monitoring has been enhanced to ensure the protection of drinking water to downstream users. Sampling has been increased to three times a week and lab results are expedited so if there was an accidental release, downstream users could be notified in a timely manner.

Mr. Heffner discussed radiation dose noting that dose is calculated for "maximally exposed individual." Air pathway dose in 2000 is .04 mrem versus .06 in 1999. Liquid pathways dose is .14 mrem in 2000 versus .22 in 1999 and the sportsman dose is 63 mrem. Mr. Heffner provided the compliance summary for 2000 stating it was a good year with no notices of violation. In preview, he stated there are two violations in 2001.

### **Administrative Committee Report**

Lola Richardson presented candidates for consideration in 2002 and candidates in attendance were introduced. Ms. Richardson also presented the final FY2001 CAB budget (see attachment). The CAB spent 72 percent of its budget for 2001. Tom Heenan commented that the Board continues to be prudent in its expenditures, which is appreciated by the Department. Ms. Richardson noted recent outreach activities, including the recent issue of the "Board Beat," the essay contest with Langford Middle School and upcoming Citizens for Environmental Justice meetings. She encouraged interested Board members to attend. Ms. Richardson also announced that nominations for officer elections could be made until early January and official notification would be provided.

### **Public Comments**

#### **Trish McCracken, Augusta, GA**

Ms. McCracken commented that EPA was not available at the last meeting where there was discussion regarding the Federal Facility Agreement. Ms. McCracken questioned if EPA generally attended committee meetings. She noted there is no longer a website for the Nuclear Regulatory Commission available for the public. She also stated that the public is very interested in emergency plans for groundwater. On Monday evening, Ms. McCracken noted that the groundwater orientation session was very interesting. She also commented that part of SRS is exempt from the main contractor and stated the SRS CAB should consider reviewing an entire map of the site and look at other areas exempt from the SRS contract.

#### **Lee Poe, Aiken, SC**

Mr. Poe provided public comment on Monday, October 22 (see attached). Mr. Poe expressed thanks to the CAB for having foresight in strategic planning but expressed dismay that very little strategic planning has occurred regarding long term stewardship. He discussed the activities of the Long Term Stewardship Subcommittee and stressed the importance of stakeholders providing their views and expectations regarding stewardship.

### **SSAB Chairs Trip Report**

Brendolyn Jenkins stated that the Chairs meeting was an awesome experience and noted the advantage point of seeing just how effective the SRS CAB is compared to DOE complex. Karen Patterson noted the presentation by Gene Schmitt and the input the Board Chairs provided to Jessie Roberson. She commented that the Environmental Management Advisory Board is a policy board not related to site specific decisions, which made her feel more comfortable with the lack of specific SRS representation on that board.

### **Handouts**

SRS CAB Agenda, October, 2001  
SRS CAB 2002 Meeting Schedule  
The 2001 Success Story, Tom Heenan, DOE  
Letter to Karen Patterson from Jessie Hill Roberson, dated October 11, 2001  
Operations Update, October, 2001  
SRS CAB Recommendation Summary Report  
SRS CAB 2001 Self Evaluation Results  
Consolidated Incineration Facility Optimization Study, Tony Maxted, BNFL  
Effects of Eliminating Compaction of Job Control Waste, Elmer Wilhite, WSRC  
Operating Strategy Studies for the Solid Waste System Plan, Bill Willoughby, CAB  
Scrap Metal Programmatic Environmental Impact Statement, Sonny Goldston, BNFL  
PEIS on Disposition of Radioactive Scrap Metal, Meryl Alalof, CAB  
Vadose Zone Contaminant Migration Software, Gregory Rucker, WSRC  
Groundwater Mixing Zones, Jimmy Mackey, CAB

Eating Fish from the Savannah River, Jimmy Mackey, CAB  
Security at SRS, Kevin Hall, DOE  
Environmental Monitoring Annual Report, Jim Heffner, WSRC  
Email to EM SSABs from Fredrick Dowd regarding Long Term Stewardship Plan  
Letter to Karen Patterson from Lewis Shaw, dated October 17, 2001  
SRS CAB Fiscal Year 2001 Budget Summary  
SRS CAB Calendar  
NEPA Monthly EIS Report  
Comments at October 23, 2001 CAB Meeting by W. Lee Poe, Jr.

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