



September 1994 Meeting Minutes

SRS Citizen's Advisory Board

Beaufort, S.C.

Members Present

Members present were Julie Arbogast, Thomas Costikyan, Brian Costner, Myles Grant, Thomas Greene, Walter Jones, Harry Jue, William Lawless, Josephine Nestor, Lane Parker, Kamalakar Raut, Robert Slay, Perjetta Smith, Patricia Tousignant and Beaurine Wilkins. Ex-Officio Representatives were Steven Richardson, Myra Reece and Ann Ragan.

Members absent were Anne Brown, Lenola Cooks, Rachael Harper, Alice Hollingsworth, Thelonius Jones, Ann Loadholt, Kathryn May, Mildred McClain, Andrew Rea and Moses Todd. The Environmental Protection Agency (EPA) was not represented. The Department of Energy (DOE) Designated Federal Official present was Steven Richardson.

This meeting was open to the public and posted in the Federal Register in accordance with the Federal Advisory Committee Act.

Key Decisions Made by Board

No key decisions were made by the Board since a quorum was not present.

Approval of Minutes

No comments or changes were made to the minutes of the August 23, 1994 meeting. A motion for approval of the minutes was not possible due to the lack of a quorum and was delayed to the October 25, 1994 meeting.

Administrative Items

Bob Slay announced a meeting will be held on October 5 of all DOE Environmental Management Site Specific Advisory Board chairpersons. He asked the Board to provide him with any questions or issues they would like discussed at this meeting. He said a full report would be given to the Board upon his return.

Bob Slay also announced that he had been contacted by Andrew Puzzio of the Consortium for Environmental Risk Evaluation (CERE) regarding CAB participation in a CERE-sponsored workshop to be held on October 18 and 19, 1994. He stated Tom Greene would be attending this

workshop. Brian Costner stated he had also received an invitation to participate in the workshop and had worked through the proper channels as instructed to make Bob Slay and Mildred McClain aware of the invitation. Mr. Costner stated he has concerns about the process of determining which Board member may attend special functions.

Bob Slay requested that Board members refer any invitations they may receive requiring CAB representation to he or Mildred McClain as co- chairpersons.

Brian Costner stated he would like to move that the Executive Committee begin developing operating procedures and present them to the full Board. Bob Slay stated this motion could be added to the agenda for the next meeting but could not be accommodated during this meeting, as stated in the bylaws.

(During lunch it was announced that Bill Lawless and Brian Costner would be attending the CERE workshop on October 18 and 19.)

Following a discussion of letters received by the Board from members of the public, Brian Costner asked for an explanation of the process that would be followed in responding to such requests. He asked if the intent was for the CAB to re-craft responses or simply send the responses from the agencies with a cover note attached. He stated if responses are to be recrafted, then more Board members should be involved than just the co-chairs.

Jo-Ann Nestor stated she felt the co-chairs had been selected and given responsibility for matters such as this and should be allowed to take certain actions. Several other Board members agreed with her. Harry Jue stated the Board needs to be aware of what co-chairs are doing.

Ann Ragan stated the responses provided by the South Carolina Department of Health and Environmental Control (SCDHEC) was from their perspective and asked if the Board would respond as if it was their position. Bob Slay stated they would not and that the information should stand as it is with a cover letter from the CAB to those who request information through the CAB.

Agency Updates

Ann Ragan announced a public meeting would be held on two Records of Decision on October 11 at 5:30 p.m. at the Saint Thaddeus Activity Center in Aiken. She stated these actions were for Tank 105C and the Mixed Waste Management Facility. *(It was later clarified that the October 11 public meeting was to discuss two proposed plans on TNX Groundwater and the D Area Oil Seepage Basin.)*

Steven Richardson discussed the October 11 public meeting on TNX Groundwater and D Area Oil Seepage Basin proposed plans. He also mentioned that DOE is hosting two workshops to gain public involvement in contract reform for SRS. He stated DOE is interested in what citizens think the new contract should entail.

Budget Subcommittee Adjustment Recommendation

Tom Greene, Budget Subcommittee Chairperson, presented the Board's budget proposal which had been modified by DOE-SR. He stated it was approved locally, but must also be approved by DOE-Headquarters. (see attached) He said adjustments could still be made by DOE-Headquarters.

He stated the budget proposal of \$402,000 had been modified to \$345,000 and then explained the budget's various sections where cuts or additions had been made. He gave an explanation for each modification. Mr. Greene then suggested that the budget proposal be adjusted to allow for honorariums of \$100 per day for all Board members and that \$66,000 be added back into the budget. He said the grand total of the budget proposal will now be \$411,370. He received no comments from Board members regarding the adjusted budget proposal.

Bill Lawless asked for a status on the honorariums. Bob Slay replied that DOE-Headquarters was working on a proposal for those who wanted to apply for the honorarium and that it would be discussed at the next meeting. He stated that he and Mildred McClain had been working this issue behind the scenes and later during the meeting read a letter (see attached) that was mailed to Secretary Hazel O'Leary on September 23. Brian Costner stated he did not feel it was appropriate to raise the issue directly to the Secretary at the time, based on his understanding of efforts undertaken to resolve the lunch issue. Tom Costikyan agreed with Mr. Costner. Bill Lawless agreed with Brian as well but stated he understood the level of frustration and that this may be the only way to resolve the issue.

Lane Parker stated he concurred with the letter and stated that the Board had been more than patient on this issue. Tom Greene, Jo-Ann Nestor and Julie Arbogast also agreed the letter was appropriate.

Walter Jones questioned the use of 1994 available funds and what happened to the unused portion. Clay Jones explained the funds appropriated for fiscal year 1994 did not carry over to 1995 and would be returned to the U.S. Treasury.

Bob Slay stated he hoped to discuss budget matters at the meeting of all DOE board chairpersons and see if other boards were working under the same constraints. Lane Parker stated he was frustrated with constraints and did not think the CAB should tolerate them.

Brian Costner stated that budget constraints were not the only issue hampering Board operations and that other boards had set up subcommittees which were actually getting work done and that the CAB should look at internal problems and not just at DOE.

Bill Lawless Motion

This agenda item was postponed until October 25, 1994, for lack of a quorum.

Technical Briefings

Four technical presentations were sponsored by the Education Subcommittee. They included an overview of Decontamination and Decommissioning (D&D) activities by Sherri Johnson of

DOE and Dennis Stevenson of Westinghouse Savannah River Company (WSRC); a presentation on the recycling of contaminated materials by Bill Boettinger of WSRC; an overview of Solid Waste streams by Brent Daugherty of WSRC; and an update on the Waste Management Environmental Impact Statement and the Draft Site Treatment Plan by Clay Jones of WSRC. (Copies of the presentations are attached. See Appendix A for a summary of the presentations and questions and answers.)

Subcommittee Reports

Membership Subcommittee

Beaurine Wilkins stated that, in the absence of any objection, she would begin working to replace Moses Todd. She stated she had examined the applicants on file and that no applicant met the criteria for this position. She stated this vacancy would be publicized. Bob Slay asked that she stress the time commitment required for Board participation.

Education Subcommittee

P.K. Smith asked the agencies to provide a list of priority issues to her by October 14.

Risk Management and Future Use Subcommittee

Brian Costner stated the subcommittee began developing operating procedures the previous evening and that he would present them next month to the full Board. He also stated at that time he would like to identify exactly which Board members wished to participate on the subcommittee. He stated several key and potentially controversial ideas had emerged from the previous evening. He said citizens wanted some kind of designation as participants of this subcommittee other than just being a member of the public attending meetings and asked for a name such as "associate member" even if they could not be voting members. Mr. Costner asked for Board members' opinions about this issue.

Brian Costner also stated the subcommittee began developing a work plan. He said the subcommittee had taken broad topics and narrowed them down to one to three projects of focus. He said these topics are future use, work being done by CERE and developing risk assessment guidance. He asked for direction concerning whether the subcommittee should have its own work agenda and eventually make recommendations to the CAB, or if it should wait until the CAB had made a decision about the direction it would take as a Board.

Bob Slay stated it may be a mistake to allow one section of the public's opinion to carry more weight than other segments of the population. Tom Costikyan said he liked the idea of giving non-Board members a label for participating on the subcommittee and thought it would help them to remain committed. He said he worried about them becoming occasional commentators.

Jo-Ann Nestor cautioned that this could lead to non-Board members expecting appointment to the CAB when a vacancy occurred. Julie Arbogast said she thought giving them a title was

appropriate as long as they were aware of the rules up front. Lane Parker stated something should be done to stimulate their interest.

Brian Costner said he would present operating guidelines to the Board next month for its approval. He asked if the Board was comfortable with the Risk Management and Future Use Subcommittee beginning to pursue one or two projects to build a knowledge base so that, when appropriate, it could bring recommendations before the full Board. The Board was in agreement.

Administrative Items

Bob Slay announced that handouts would no longer be included with draft minutes when mailed to the Board to avoid duplication. He also asked Board members to provide any outstanding travel vouchers.

Mr. Slay stated Tom Costikyan would be addressing the Beaufort County Council about the CAB at its request.

Public Comment (September 26, 1994 6 p.m.)

Commentor: Bob Newman, Fripp Island, S.C.

Mr. Newman discussed his background in the nuclear industry. He said that environmental cleanup needs to be a high priority for the DOE complex. He said he hoped the CAB insists that definitive and quantitative goals be established by DOE and discussed the need for disposing of high-level waste. He stated however that zero risk was not obtainable and an unreasonable goal and that radiation was everywhere. Mr. Newman warned that SRS programs not be founded on job security and stated that many documents are developed through research that are never implemented. He discussed vitrification of high-level waste and the background of this technology. He stated that DOE simply needs to comply with the law and meet industrial standards. He stated he was aggravated with people who were against doing anything with spent nuclear fuel and asked the Board to look into this and stated that the CAB could show DOE how to be responsible and clean up the environment through its recommendations.

Commentor: George Minot, Hilton Head Island, S.C.

Mr. Minot commented on environmental cleanup and asked that SRS let the general public know what risks are involved. He stated the public has not heard any news other than how many jobs are created at the site and that the public should be educated about risks. He said SRS should put in six new facilities to clean up if that's what it takes and then shut down. He stated that SRS waste would not go anywhere, nor would the land be used in his lifetime or his children's.

Handouts

- "SRS Citizens Advisory Board Proposed Budget - FY 1995," Tom Greene.
- "SRS Draft Site Treatment Plan and Waste Management Environmental Impact Statement Status Review," visuals, Clay Jones.

- "Decontamination and Decommissioning," visuals, Sherri Johnson and Dennis Stevenson.
- "Stainless Steel Beneficial Reuse Initiative," visuals, Bill Boettinger.
- "Solid Waste Streams," visuals, Brent Daugherty.
- "Letter to Board Members including the compensation guidance from DOE-Headquarters."
- "Motion for Independent Peer Review," Bill Lawless.
- "Environmental Studies dealing with Spent Nuclear Fuel," fact sheet.
- "State's lawsuit won't solve spent fuel problems," editorial, Brian Costner.

Appendix A: Technical Briefings

Waste Management Environmental Impact Statement and Draft Site Treatment Plan Status Review

Clay Jones gave an update on the Waste Management Environmental Impact Statement (WMEIS) and the Draft Site Treatment Plan (DSTP). He discussed the various waste types and how the two documents were related. He explained that the DSTP covers a five-year period, while the WMEIS looks at a 30-year period and is much broader in scope. He also discussed the Defense Waste Processing Facility Supplemental EIS, which covers high-level waste treatment and disposal, and discussed the interrelationship of the three documents.

Questions and Answers

Q. Will you put all three documents into one?

A. No. The three documents have three separate purposes. However, the WMEIS integrates them all to some extent.

Following discussion of mixed waste and the fact that the National Governors Association will be meeting soon to discuss this topic, these questions were asked:

Q. What type issues will the governors discuss?

A. Whether each site should treat its own waste and what it would take for each individual site to do so versus the national picture. For example, SRS has small amounts of mercury-contaminated oil and equipment, whereas Idaho has larger quantities of the same kind of waste. SRS mercury-contaminated waste could be shipped there. The Naval shipyards have mixed waste solvents they would like SRS to treat.

Q. Would the mixed wastes be shipped offsite for treatment but not disposal?

A. If waste is proposed to be treated someplace other than where it resided, it could come back to be disposed. It is highly politically charged. Idaho wants to treat waste and send it back. The National Governors Association will have to find an equitable solution.

Q. What is the inventory of mixed waste at SRS?

A. There is 155,808 cubic meters or the equivalent of about 2,000 tractor trailers full. The majority of it is high-level mixed waste and will be handled in the Defense Waste Processing Facility. Five percent of it is transuranic wastes and will be sent to the Waste Isolation Pilot Plant, assuming it opens.

Q. What is the status of the Consolidated Incineration Facility?

A. Construction is almost complete and a trial burn is scheduled for September 1995 with startup of the facility in December 1995. A Record of Decision on the WMEIS is needed prior to trial burns.

Q. Do you plan to treat any of these wastes from outside the United States? What about spent nuclear fuel?

A. No. The nuclear fuel coming back to SRS was generated in the United States and has been used in foreign research reactors.

Q. When will all waste treatment facilities be complete?

A. For existing facilities, all will be in operation by the end of 1996.

Decontamination and Decommissioning (D&D) Overview

Sherri Johnson gave an overview of how the D&D program came under the Office of Environmental Management and discussed the goal of the program, which is to eliminate or reduce risk from surplus contaminated facilities. She explained that the D&D program was part of the Environmental Restoration programs at SRS, but dealt with facilities such as buildings, structures and equipment, rather than waste sites, basins, groundwater or soil which are considered remedial actions.

Questions and Answers

Q. Does the Federal Facility Agreement cover D&D activities?

A. D&D does not fall under the Comprehensive Environmental Response Compensation and Liability Act and there are no environmental laws governing D&D activities. It would only be covered in the Agreement if there was a release to the environment.

Q. Is the D&D program only structurally set up under the Environmental Restoration (ER) Programs or does this include funding as well?

A. The D&D program competes for environmental restoration funds. Environmental restoration work is done first and D&D gets whatever money is left. It is not a separate DOE-HQ funded program.

Q. Is there nothing driving D&D activities?

A. Nothing other than the DOE-SR position to address worker safety, the environment and public health as priority.

Q. Will there be a driver?

A. Given the money available, the engine driving it now is getting smaller and smaller. Other sites have chosen to incorporate D&D into Environmental Restoration and regulators have agreed with this idea. Fernald leads the complex in making D&D and ER one process.

Dennis Stevenson presented definitions of terms and explained the decommissioning process. He explained that decontamination is the removal of radioactive or hazardous materials and that various methods are used to accomplish this activity, such as wiping, washing, spraying, scraping and abrading. He stated decontamination might be completed to either reduce health hazards, prepare for reuse or minimize waste volume. Mr. Stevenson explained decommissioning was to remove a facility from service, removing the hazards and dismantling the facility. He said this was done when the facility's mission had ended, or when it was necessary because of associated risk, or when cost effective. Mr. Stevenson discussed current D&D activities at SRS and the issues related to these activities. He also provided several examples of these activities.

Questions and Answers

Q. Are workers conducting D&D activities protected by plastic suits?

A. It depends on the contamination present. Some suits could be cloth with respirators. When contamination is at higher levels, plastic suits with air are used so workers are contained in a clean environment.

Q. Would a plastic suit protect a worker from gamma rays.

A. No, but the purpose of the suit is to protect the worker from inhaling dust and it getting into their lungs. When clothing is not protective, other mechanisms are used, such as lead shielding, time, distance and robotics.

Q. Are there any cost standards for D&D activities?

A. That has been studied, but there is no clear table. It depends on the contaminant. The largest cost saver is a trained work crew.

Following discussion of the Heavy Water Components Test Reactor (HWCTR), a facility where four auxiliary buildings were removed completely, the following questions were asked:

Q. What was the cost of decommissioning these facilities?

A. To completely remove the four buildings, it was \$400,000.

Q. What was the contamination at the buildings?

A. No major radioactive contamination, but some asbestos problems.

Q. What do you plan to do with HWCTR?

A. Clean out the reactor building and remove asbestos and the components. It is uncertain what will happen to the reactor building itself.

Q. How many square feet were the auxiliary buildings?

A. A few hundred feet each.

Q. Is HWCTR stable?

A. Yes, it is in pretty good condition, but it provides good experience for dealing with other reactors when it comes time to decommission larger ones. It is a big opportunity for learning about the D&D process.

Following discussion of D&D activities at the R-Area Helium Compressor Building, or the R-Area Auxiliary Building Demolition, where 7 buildings with hazards were torn down, the following questions were asked:

Q. What was the total cost of this D&D activity?

A. Approximately \$900,000.

Q. What is the status on the proposal made to D&D R-Reactor?

A. That was an unsolicited proposal which was reviewed and is not at a dead end. DOE has decided to submit a request for proposals to get more proposals for R-Reactor, but it has not yet been done.

Q. Was the proposal sound and what was the cost associated with it?

A. Yes, the proposal was sound, but it was a management decision to send a request for proposals in order to be competitive. The cost associated with the proposal was a maximum of \$200,000,000.

Following discussion of the 232-F Tritium Facility, which is an old tritium extraction facility and a high priority for upcoming D&D activities, the following questions were asked:

Q. What is the contamination?

A. The contamination is contained in the process area of the building, and is tritium, beta-gamma, minimal asbestos, mercury and other chemical hazards. The building has been unoccupied since 1959.

Q. Is the stack contaminated?

A. We have not been in to look yet, but we suspect there is a minimal amount of tritium since it naturally decays and has a half life of 12 years. Much of it would have decayed since 1959.

Q. Are there people working around the facility in trailers?

A. Yes, within a few hundred feet, and we have to make people understand what we are doing, the associated hazards and what precautions are necessary.

Q. Which decommissioning option is the most cost effective?

A. It depends on each facility and its condition. These are 40-year-old facilities and must be dealt with individually. There is no formula. Decisions must be made on a dollar basis, but health and safety are most important.

Q. What is the prognosis for ever getting more funding for this program?

A. Currently, the priority is placed on ER milestones and legal drivers. In fiscal year 1995, there is not enough money to even address all the ER legal drivers. The current D&D budget for DOE-SR is \$2.8 - \$3 million dollars and that is to simply maintain the program in fiscal year 1995.

Q. From the work done at SRS thus far, do you think you understand the risks at surplus facilities well enough to know what you are doing?

A. For the most part, risks to the worker are minimal with the exception of the 232F building.

Sherri Johnson completed the presentation by discussing anticipated fiscal year 1995 activities.

Q. Why are you requesting proposals for work you have no funds for?

A. We are trying to get all procurement actions out of the way so that when funding does become available, we can complete the work in a timely manner.

Stainless Steel Beneficial Reuse Initiative

Bill Boettinger explained the concept behind this initiative, which is that waste containers be produced using existing radioactive scrap metal by melting it down and refabricating it into a container. This would eliminate the need to obtain clean waste containers which, when used within the DOE complex, become contaminated. He said when the metal is melted, most of the contamination is contained in a waste form called slag. The slag will be disposed, while the boxes and drums are expected to have lesser amounts of contamination. He stated that 68 SRS

heat exchangers are the equivalent to 170,000 55-gallon drums, or 2300 5-foot wide spent fuel canisters. He discussed an integrated demonstration to test this initiative and stated two contracts have been awarded to private industry to melt radioactive scrap metal and fabricate these products.

Questions and Answers

Q. Are you going to be creating more problems by reusing these materials?

A. No. The calculations lead us to believe the cost are slightly higher than the cost of containers, including all handling costs. But it pays for itself when you look at avoided costs of having to dispose of the contaminated metal.

Q. How difficult is it to handle brand new but contaminated drums?

A. There is no problem in moving them around and there are no special handling requirements at these levels of contamination. The requirements are to keep track of the drums which will require us to set up administrative controls. The drums will be contained in a controlled environment.

Following discussion of the site's experience in dealing with stainless steel drums and the number of drums on site which contain heavy water, the following questions were asked.

Q. Is your cost estimate of \$100,000 per barrel based on the cost of making heavy water, or what someone would pay for it?

A. It is the cost to make the heavy water.

Q. Is there a market for heavy water?

A. There is not much of a market today.

Q. What do you do with the barrels?

A. We have to retain an inventory of heavy water for the reactors which are on standby.

Q. Is there any monitoring done to determine how radioactive the scrap metal is when it leaves SRS and then when it comes back as a product.

A. We sample all metal before it leaves SRS and we also require the vendors to send samples of the meltdown material or slag. The boxes, barrels and slag are analyzed when they return to SRS.

Q. Are there companies that do this type work?

A. Yes, Carolina Metals, Inc. in Barnwell, S.C. and Manufacturing Sciences Corporations in Oak Ridge, Tenn., are two companies that have been awarded contracts with DOE.

Q. What happens to slag when it comes back to SRS?

A. It is disposed as low-level radioactive waste. It is a much smaller volume than when it was sent out for processing.

Q. Why are you sending 20 tons of scrap metal to Barnwell and 40 tons to Oak Ridge when Barnwell is closer and there is less transportation involved.

A. Because of the capabilities of the companies. Price is also a factor.

Q. Were the companies investigated?

A. Yes. A quality assurance review was conducted and they were deemed acceptable. Some steps may need to be taken by companies to meet quality assurance reviews.

Q. Have you factored in the D&D costs of these company facilities?

A. The private companies are responsible for their own processing and permits as well as D&D costs.

Solid Waste Streams

Brent Daugherty discussed various solid waste streams including sanitary, low-level, hazardous and mixed wastes. He provided definitions of these waste streams and discussed past and current practices. He also presented inventories of the waste, rates at which the waste is generated and current plans for treatment, storage and disposal of wastes.

Questions and Answers

Following discussion of sanitary waste and the current plan to procure a subcontractor to collect and haul SRS waste to an offsite landfill (the contract was awarded to Hickory Hill in Jasper County), the following questions were asked:

Q. Will this include waste below regulatory concern?

A. This waste will be strictly cafeteria and office wastes and may include special cases, such as pesticides, but there will be no waste from a radioactive controlled area.

Q. Is Hickory Hill subtitle D, and how many miles is it from SRS?

A. Yes it is subtitle D and it is about 150-mile round trip.

Q. What if in the future, hazardous constituents are found in the landfill and linked backed to SRS.

A. That is no different than the problem we are dealing with now on site. Solvent rags were buried in the SRS landfill that later were deemed hazardous. When you look at the known costs of building a new, high cost landfill at SRS, it is a better use of taxpayers dollars to dispose of SRS waste at municipal landfills, as do other DOE sites and other industries. SRS management decided to go forward because it is more economically justified at this point.

Following discussion of low-level radioactive waste, of which there are five main categories, and the SRS burial ground, the following questions were asked:

Q. How large is the burial ground?

A. There are three areas in the burial ground. The "old burial ground" is 76 acres, another area initiated in 1972 is 119 acres, and a new area of low-level waste vaults is about 100 acres.

Q. Will all wastes go into the new area of the burial ground or the vaults?

A. The Environmental Impact Statement is looking at the option of putting some waste in shallow land burial, such as suspect soils, which is more economically feasible.

Q. What is the projected life of the vaults and how many will there be?

A. That is all part of the Environmental Impact Statement and yet to be determined. A vault will most likely be filled to capacity in one and a half years.

Q. When you close one of these vaults, what will be put on top of it?

A. It will be closed with concrete and capped. Monitors will be installed to monitor the area. It will be topped with four to six feet of soil and grass.

Following discussion of the long-lived waste storage building and the projected inventory of waste for this facility, the following question was asked:

Q. Why does the projected inventory of waste grow so much from 1995 to 1996?

A. We are assuming waste will be generated from environmental restoration and D&D activities.

Due to time limitations, no questions were asked concerning hazardous and mixed wastes.