



SRS Citizens Advisory Board

Risk Management & Future Use Subcommittee

Meeting Summary

Monday, July 22, 1996

Aiken, SC

Meeting attendees included: Vernon Zimmerman, CAB RM & FU Chair, CAB Members Anne Brown, Kamalakar Raut, Bill Donaldson, Ann Loadholt and Karen Patterson. Board facilitator Walt Joseph was also present. Others in attendance were: Audrey Gotsch, Cynthia Warnick, Michael Bonner, Tom Rolka, Cheryl Nybro, Beth LeMaster, Steve Stine, and Chuck Powers.

Chris Metzger, Clay Jones, Mary Flora, Barry Shedrow, and Robert Meadors of Westinghouse Savannah River Company were also present. Gerri Flemming of the Department of Energy was present as the associate deputy designated federal official.

Vernon Zimmerman, RM & FU subcommittee Chairman, opened the meeting at 7:00 PM. He invited everyone present to introduce themselves, and that being done, introduced the agenda and the schedule for future meetings. Mr. Zimmerman expressed a concern that others felt that the RM & FU meetings were not held at regionally diverse locations. He said that the subcommittee needs to ensure that the locations are equitable for all concerned about committee issues.

A "mid-point" location will be considered for the December meeting- such as Barnwell or Allendale. Mr. Zimmerman then introduced Mr. Robert Meadors, the evening's first presenter.

Mr. Meadors explained that he was a manager in Strategic Planning & Mission Development for WSRC. Basically, his group seeks to apply the resources and technologies of SRS to meet the needs, problems, and issues of the site and the DOE complex. His group assists in developing the information and technical input for on-going Environmental Impact Statements (EIS's) for future mission decisions.

Future mission projects may be placed in two key categories: projects dealing with National Defense, and projects dealing with legacy materials. National Defense projects could include: tritium recycling, tritium production (accelerator or light water reactor), plutonium pit fabrication, inter-site cooperation on plutonium issues, and stockpile stewardship for defense needs.

Legacy materials projects could include: surplus fissile material disposition program, canyon stabilization, vitrification of plutonium or preparation of PU oxide for MOX fuel. Other projects could include an Actinide Vault Facility with modular, add-on units, and a mixed oxide facility (MOX). Regarding foreign research reactor spent nuclear fuel (SNF): there was an original agreement that the fuel would be returned, and this has been happening all along. The challenge

now is for disposition. SRS may provide a new packing and storage facility and either process the SNF utilizing DWPF glass logs as the disposal form or implement new technologies in a new treatment facility (the EIS decision process is on-going). The 10 Year Plan will seek more EM funding for near-term facilities.

Mr. Zinnerman stated that there were not enough hand-out sheets on this subject. He also expressed a concern that events were unfolding related to future use and possibly related to recommendation #8 that he and the committee did not have knowledge of. Mary Flora, Public Involvement Manager, stated that the NEPA update will help with that situation (the next presentation). Clay Jones, Program Integration Manager, stated that the PU Forum addressed "store or process" issues and life cycle cost issues.

The next presenter was Barry Shedrow, of the WSRC NEPA group. The National Environmental Policy Act requires environmental evaluations of new projects. These evaluations either take the form of an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). These documents have a direct bearing on future use at SRS. Mr. Shedrow stated that he would like to give updates on the EIS's that are currently being done that affect future use. Mr. Zinnerman stated that this information wasn't really what he was looking for when he made the request Ms. Flora stated that, in fact, these EIS summaries were related to future use issues.

During the course of the discussion, several questions were asked and comments made. Regarding the Riverwater EIS, a question was asked regarding the status of Par Pond and L-Lake if pumping was discontinued. L-Lake may dry up in seven years, as it is approximately 1,000 acres, according to Beth LeMaster of SRFS. Par Pond would stabilize as a stream environment. Regarding foreign research reactor spent nuclear fuel, Mr. Zinnerman commented that the agreement to have the fuel returned to the U.S. was made before the fuel was even sent to other countries. Mr. Meadors commented that, indeed, this is U.S.-origin fuel and it has been returned and processed for many years. The return and processing practice was interrupted 7 years ago. To address the significant issue of nuclear nonproliferation, the U.S. has resumed its policy of returning the FRR SNF to the U.S. DOE is now deciding how the SNF will be managed and disposed.

Mr. Zinnerman then stated that there seemed to be much uncertainty regarding the FRR SNF storage/processing issues. Another member asked how this issue was being addressed. Mr. Jones stated that some aspects such as the Yucca Mountain storage facility are beyond DOE control. There are the risk questions regarding the site storage area. Mr. Zinnerman stated that being kept informed is the key. One member stated that it was a matter of jobs versus a nuclear dumping ground perception. Also, what is the CAB's position on this issue? Ms. Flora stated that the Nuclear Materials Management Subcommittee is currently meeting on this issue.

Mr. Zinnerman then suggested that the CAB should look at the possibility of a joint subcommittee meeting. Ms. Anne Loadholt, Vice Chairperson of the CAB, suggested staggered subcommittee meeting times to facilitate dual attendance and interaction of subcommittee members- perhaps 45 minutes in length. Mr. Bill Donaldson, Vice Chairperson of RM & FU, stated that the return of the FRR SNF is extremely important, given the amount of fuel that may be in Russia that we haven't heard about in the media.

One member of the group stated that the subcommittee may be more interested in EA issues as opposed to EIS issues. Mr. Zinnerman agreed that is probably true, but the subcommittee is interested in these as well. Mr. Shedrow stated that the majority of EA's end up as FONSI's (Finding of No Significant Impact). Mr. Jones stated that these items help give a perspective of future use issues. Another contact person for future use issues is Chris Van Horn.

The next presenter was Beth LeMaster, Wildlife-Fisheries-Botany Chief at the Savannah River Forest Station. She explained that her entire presentation was not focused on recreational uses. She gave an overview of the U.S. Forest Service and its functions. She also explained the inter-agency agreement between DOE and the Department of Agriculture. Signed in 1952, the agreement provides for reimbursement of costs to the Forest Service from DOE.

This site is unique, in that the land is owned by DOE, but the natural resources are managed by the USFS. Ms. LeMaster went on to describe some of the flora and fauna of the SRS. Highlights include: Red Cockaded Woodpeckers, Bald Eagles, and Carolina Bay wetlands. She explained the fire-dependent eco-system on much of the site, and the forest management practices used to harvest timber and pine straw. Regeneration is a major part of those practices, with regard to trees, soil erosion, and water quality.

The Forest Service plays host to an Environmental Education program for Elementary through High School students. The Crackerneck Wildlife Management Area has recently been expanded to offer a total of 10,600 acres of recreational opportunity. Crackerneck is used mostly for hunting, but is open to other recreation as well on the days that it is open. That area is open a total of 21 full days per year. Crackerneck includes an 8-acre pond. The USFS' role has changed dramatically over the years. The Forest Service seeks to both care for the land and serve the people. Ms. LeMaster would like to hear any and all ideas for USFS participation in future use planning. A start has been made already toward the "zoned" concept from CAB Recommendation #8. Crackerneck has been expanded, and the lower Hunt Units (8, 9 and 10) could be controlled enough for recreational uses as well. Ms. LeMaster will give tours by request.

Several questions were then asked of Ms. LeMaster:

Q. How has DOE budget cut-backs affected the Savannah River Forest Station?

A. SRFS has 90 employees, one of the smallest "contractors" on site. The cut last year was from \$16 to \$12 Million. The timber sale proceeds go back into the U.S. Treasury- not to SRFS. The management of the site's resources can be accomplished by the current staff, however.

Q. How does recreational use rate in the funding choices? A. (Mr. Jones) The funding priorities at SRS have many conflicting interests.

Q. (Dr. Raut) How are the controlled-burn fires controlled? A. Through the monitoring of fuel and moisture conditions in a proposed burn area. Plans are made and natural fire breaks are utilized. The fires are set by drip torches or aerial gel emissions. This gel burns very quickly and wind direction is monitored very closely.

Q. (Dr. Raut) In California, there seems to be uncontrollable fires- what is the difference?

A. At SRS, we have 4-5 year controlled burns to lessen the catastrophic wildfire danger. Out West, they are unable to have such controlled burns.

The RM & FU subcommittee's Agenda was altered to allow Dr. Kamalakar Raut to be the next presenter. Dr. Raut is a CAB member who also sits on the Savannah River Site Health Effects Subcommittee of the Center For Disease Control (CDC). Dr. Raut gave an overview of the subcommittee and its work. Please refer to the enclosed handout titled "savannah river site health effects subcommittee". Dr. Raut explained that the subcommittee was formed for the purpose of cross-education and is funded by the DOE and Health and Human Services (HHS).

Next on the Agenda was Ms. Cheryl Nybro, Risk Assessor with the South Carolina Department of Health and Environmental Control (SCDHEC). Ms. Nybro's topic was "Risk from the Regulator's Point of View", and she began by explaining how human health risk assessment and ecological risk assessment are inter-related. For example, Ms. Nybro began, if there is an ecological risk to the Carolina Bays, and the bays dry up, then there may be a human health risk from breathing the dust blown by the wind. That dust from the sediments may contain contaminants. The two kinds of risk can overlap. Her agency's job is to enforce the regulations (laws).

Ms. Nybro went on to explain that risk is perceived in different ways by different individuals; particularly when it comes to voluntary versus involuntary risk. Risk Analysis is a scientific process, whereas Risk Management is the process of choosing between alternatives. What is acceptable risk? Factors considered in risk analysis include: population characteristics relative to the site, current and future land use, sub populations of concern, toxicity, and carcinogenic effects.

Ms. Nybro went on to explain some details regarding the Fish Advisory study for the Savannah River. She said that there was some uncertainty in the research methods, but the advisory needed to be issued to ensure health. The percentages of the risk of having fish contaminated with radioactivity is interesting to note: 58% of the risk is in the area adjacent to SRS, 39% downstream, and 3% upstream. The SCDHEC never said "don't eat the fish", but given the fact that some radioactive content was found, the advisory was needed. The advisory deals with maximum amounts of fish over a certain amount of time. Filleting and broiling the fish is a better method of cooking than frying, to further avoid any affects. Several questions were asked of Ms. Nybro.

Q. Will you design a study that uses valid data?

A. Yes, we are working on it right now, we need more scientific study- and the study will probably be on-going.

Q. Where is the contamination coming from?

A. From historical seepage from the 1960's, mainly- this is not current contamination that we are discussing.

Comment (Mr. Jones): Tomorrow, Jim Heffner (WSRC) and Tom Hinton (SREL) will speak about the SRS eco-system and environmental monitoring.

Q. (Dr. Raut) By what method are fish samples collected? Does this advisory affect commercial fishing?

A. The method is electro-shocking. There is some commercial fishing on the Savannah- the Mercury advisory is throughout the region.

Q. What is the amount of fish for sale in the market that may be affected.

A. Hard to know the source of fish, especially in smaller stores or stands.

Comment (Mr. Zimmerman): The fish study is on-going.

The meeting then went on with the next topic, from previously on the Agenda, the EM 10 Year Plan. This discussion was led by Clay Jones. Mr. Jones explained, for the group's information, that Tom Grumbly, the former head of Environmental Management for DOE, has moved to the position of Under Secretary of the Department. Al Alm took over from Grumbly and came into office with a vision to restructure the workplan. From the Baseline Environmental Management Report (BEMR), it was determined that it would take DOE 70 years and \$230 Billion to clean up the sites. This was unacceptable to Mr. Alm, who devised a 10 Year Plan, to get the bulk of the work done by the year 2006. By that point, some of the sites may be able to clean up completely, and then there would be money saved to use at other sites. The money saved may be needed as "up front" costs for sites such as SRS to complete their clean up. This idea is assuming, constant, flat funding. This plan requires the support of the public in order for the up front money to be available. Cooperation between sites can help the plan, as well, such as utilizing specific site technologies to help other sites reach their goal.

The final speaker of the evening was Walt Joseph, CAB Facilitator, who presented a short discussion on the FY 1999 Budget Prioritization process.

Please see enclosed slides for discussion points. The two points were: the "Application of Criteria to FY 98 Budget Prioritization Process" and to "Expand Public Participation in Development of Stakeholder Criteria" by Walt Joseph.

The meeting was adjourned by Mr. Zimmerman at 9:30 PM.

Meeting handouts may be obtained by calling the SRS CAB toll free number at 1-800-249-8155.