SRS Citizen's Advisory Board

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Environmental Remediation and Waste Management Subcommittee

Meeting Summary

August 23, 1999
North Augusta Community Center
North Augusta, SC

The Environmental Remediation and Waste Management (ER&WM) Subcommittee met on Monday, August 23, 1999, at 6:00 p.m., at the North Augusta Community Center, North Augusta, SC. Attendance was as follows:

CAB Members
Bill Lawless*
Kathryn May*
Jimmy Mackey
Karen Patterson*
Wade Waters
Earnest Marshall
Murray Riley*

Stakeholders
Trish McCracken
Todd Crawford
Lee Poe
Russ Messick
Bill McDonell
Sam Booher
Brandon Haddock

DOE/Contractors
Gerri Flemming, DOE
Larry Ling, DOE
Julie Petersen, DOE
Brent Daugherty, BSRI
Ki Kwon, WSRC
Kelly Way, WSRC
Sonny Goldston, WSRC
Gerry Stejskal, WSRC
Tom Rehder, WSRC
Helen Villasor, WSRC
Jeff Newman, WSRC
Bob Aylward, WSRC
Elmer Wilhite, WSRC
Chris Bergren, BSRI
Mike Griffith, WSRC
Ed McNamee, WSRC
Helen Villasor, WSRC
Whit Gibbons, SREL

Regulators
Craig Marriner, SCDHEC
Jonathan McInnis, SCDHEC

None, EPA

Facilitator
Mike Schoener

* Denotes ER&WM Subcommittee Member

Agenda Review: Bill Lawless opened the meeting by introducing Mike Schoener, the Citizen Advisory Board's (CAB) facilitator, who reviewed the agenda for the meeting. Mr. Schoener then invited introductions from the participants and asked for public comments.

Public Comments: Speaking on behalf of CAB's approaching membership campaign, Helen Villasor noted that applications were available at the meeting for stakeholders who might have an interest in applying for membership.

Sonny Goldston commented on the Environmental Management Integration (EMI) program, a DOE complex-wide initiative that integrates DOE waste treatment activities. Mr. Goldston, who serves on the Mixed/Low Level Waste (M/LLW) Program Area Integration Team (PAIT), noted current activities the subcommittee has shown interest in:

- A task team for waste with no disposal path forward commonly known as "orphan" waste.
- A team currently meeting in Washington to optimize the use of the three DOE incinerators across the complex.
- Implementation of the new DOE Order 435.1, Radioactive Waste Management.

Mr. Brent Daugherty, who serves on the transuranic (TRU) PAIT, commented that the group's focus is now on the following:

- Consolidating and/or closing smaller sites having TRU waste, and transporting the waste to locations where there are facilities and capabilities to prepare for shipping to the Waste Isolation Pilot Plant (WIPP).
- Development of larger containers (alternative transporter) other than the TRUPACT II, which will have significant cost savings potential for taxpayers.
- Getter technology (materials that absorb and bond certain gases, i.e., hydrogen and radionuclides).

Issues: DOE decision on whether it should upgrade all three complex incinerators; Site compliance with the Environmental Protection Agency (EPA) Maximum Achievable Control Technology (MACT) Rule, Nuclear Regulatory Commission (NRC) ruling on incidental waste; TRU and NRC transport regulations; disposal of SRS's Pu-238.

Actions: Report back to the subcommittee on these issues during the October 12 and October 26, 1999 meetings; determine acceptance of the M/LLW RODs based on whether the RODs reflect the CAB's recommendation under the WMPEIS; determine how MACT Rule applies to al1 three incinerators, the cost involved and the waste forecasted to be treated at each one; since WIPP has opened, consider a new WIPP motion dealing with the transport of Pu-238.

Mr. Lee Poe presented the final public comment by noting that in late 1998, DOE had asked either the subcommittee or the focus group to look at a recommendation on interim actions for the southwest plume of the Old Radioactive Waste Burial Ground. Recommendation 75 was developed and some interim actions were identified; however, the justification for doing them was not put forward. In reviewing the *Federal Register* on August 11, 1999, Mr. Poe found a statement about a short-term closing date for the interim actions that are under consideration (a public comment period of 15 days that expired on August 4, 1999). Upon further investigation Mr. Poe discovered an Environmental Assessment (EA) had been published; however, it is Mr. Poe's opinion that it had not been publicized locally. The EA addressed two different interim actions: take care of some of the organics in the plume, and delay the amount of tritium going down the burial ground to the creek by impounding the water on the surface and then spraying it on to the pine trees in the region of the burial ground.

Issues: Mr. Poe commented that it is his belief that publishing these interim actions in the *Federal Register* with no further notice is a totally unacceptable approach. Broad public notice should be provided before spending ~$400K

Actions: Recommendation by Mr. Poe for the subcommittee to become involved by asking DOE to justify these interim actions before final implementation; identify interim actions that are acceptable since those published in the *Federal Register* differ from those presented in the CAB's Recommendation No. 75.

Schedule Review: Mike Schoener reviewed the upcoming ER&WM schedule and explained the restructuring of the issues-based subcommittees beginning in January 2000. To provide for easier

transition of issues currently under review or discussion by the subcommittee, a realignment of the schedule which includes dividing the meetings into either Environmental Restoration (ER) or Waste Management (WM) issues to the extent possible was addressed.

Issues: Reviews of pending/open recommendations should continue and be placed on the ER meeting agendas.

Actions: Paul Sauerborn to track the pending recommendations assigned to CAB members, continue follow-up pending/open ER recommendations, and add this as a topic to the issues matrix for discussion at future meetings. Schedule a formal meeting in early October to attend to open/pending recommendations. Stakeholders will be invited to provide comments or concerns on open/pending recommendations to the subcommittee for consideration.

High Level Waste (HLW) Environmental Impact Statement (EIS)/Tank 19 Update: Larry Ling briefed the attendees on the draft HLW Tank Closure EIS, which is currently under review at DOE Headquarters. Pending approval, the draft EIS will be noticed in the *Federal Register* to allow for the 45-day public comment period. Mr. Ling said that a public meeting is still scheduled for a September or October 1999 meeting. Tank 19 is still on schedule for closure in 2003, and a performance-based incentive for FY2000 has been established to have the waste heel removed and ready the tank for closure. New technologies (FLYGT Mixers and Crawlers) specifically developed for retrieval will be deployed. A draft Tank 19 closure module is also too be completed. Current conditions at Tank 19 include 13,000 gallons of salt, 20,000 gallons of sludge, and 280,000 gallons of liquid.

Issues: Lack of a NRC ruling on incidental waste could impact the tank closure effort; lack of a NRC response to CAB Recommendation No. 88 and how it affects tank closures; how is the complex progressing with tank closure programs; where was mixer and crawler technology developed; is there funding available for further technology development; is the reason for the EIS because of problems raised at other sites.

Actions: With the implementation of DOE Order 435.1 and the EIS Record of Decision (ROD) issued, HLW will report back to the subcommittee later in the winter on the progress of both; the subcommittee proposes to recommend that closure actions go forward after the EIS ROD has been issued; Bill Lawless will be attending the Third Annual High Level Waste Tank Closure Workshop in Las Vegas on October 12-14, 1999 to review the subcommittee's plans for a motion on future tank closures.

Old Radioactive Waste Burial Ground (ORWBG) Focus Group (FG) Discussion on Institutional Controls (IC): Mr. Lee Poe, Lead of the ORWBG FG presented the ICs specifically for the ORWBG. The presentation focused on how the FG considered application of IC in the FG proposed analysis and reached a conclusion that it was prudent to consider active IC for a period of 100 years beyond cessation of active operation (assuming HLW Tank closure was completed in 2038, then IC would be maintained until 2139). The IC will include surveillance, environmental monitoring and minor custodial care. In addition, all construction activities (including personnel barriers and markers) will be in place before cessation of operation. The basis the FG used to determine IC included several federal regulations, EPA Region 4 – CERCLA Land Use Control (LUC) and Assurance Plan (LUCAP), DOE M 435.1, *Radioactive Waste Management Manual*, and the *SRS Comprehensive Plan*(which defines a vision for SRS for the next 50 years). In terms of human intrusion, two fundamentally different processes were also proposed.

Issues: Does SRS have a LUCAP (each federal facility will have its own) and if so, the subcommittee needs to be involved in the process now; if DOE, EPA, and SCDHEC are developing a long-term plan, citizens need to be involved early on in the process and not wait until it is a "done deal"; it had been identified at the meeting that a SRS LUCAP is in progress and the EPA, SCDHEC and SRS legal counsels are currently finalizing the language; however, the question was raised why the public was not included in the development process; SRS is in unique position that it is not in the process of returning land back to the public; nevertheless, it is only a matter of time before SRS needs to be prepared for a

stewardship program; where is SRS archiving IC information, including barriers, markers, administrative records, deed restrictions, RODs, etc.

Actions: Jim Moore to follow-up on LUCAP with Bob Aylward/Brian Hennessey, advise Wade Waters and P.K. Smith of the Risk Management & Future Use (RM&FU) Subcommittee of time critical involvement in the LUCAP and Land Use Control Implementation Plan (LUCIP) by the CAB, and suggest a motion on this issue be developed; FG is interested in closing out issues of ICs for the burial ground only; FG will study impact of markers for the Proposed Plan to close the ORWBG.

Commendation: Mr. Sam Booher commended Mr. Poe on the complexity of his research on Institutional Controls and the quality of his presentation.

Corrective Measures Study (CMS)/Feasibility Study (FS) Process Improvement: Tom Rehder and Ed McNamee presented the CMS/FS process improvement plan with Mr. Rehder addressing the remediation process documents that highlight the unit-specific alternatives for remedial action including the CMS/FS. The goal of the remedial action is to cost effectively protect the public, the worker, and the environment from harm as a result of contamination. Stemming from work identified by the ORWBG Public Focus Group, it is believed that this would be more effectively performed if the CMS/FS reports focused on exposures to the public where the public has access rather than where they might have access at some undefined time in the future. Each of the remediation process documents were described; the flow chart to determine required data before the detailed analysis of alternatives is selected; results from previous documents; the format of the CMS/FS; and the criteria used for the detailed analysis. The CMS/FS presentation was concluded by noting that typically detailed analysis of four to five alternatives are selected, no recommendation is made for a preferred remedy and that the Proposed Plan presents the preferred alternative to the public. Ed McNamee then addressed CAB Recommendation No. 86, "Corrective Measures Study/Feasibility Study for the Old Radioactive Waste Burial Ground: by noting that he would have liked to been able to respond to each of the CAB's comments but not all of the regulatory responses have been received. However, Mr. McNamee provided responses to the first six comments.

Issues: Where are the different alternatives in the CMS/FS derived from; during what part of the process are the selections of the alternatives made.

Actions: Distribute widely an electronic copy of the latest CMS/FS draft motion.

Hidden Biodiversity at SRS: Dr. Whit Gibbons of the University of Georgia's Savannah River Ecology Laboratory presented an interactive discussion by associating the site's diverse salamander population with the health of the environment. Explaining biodiversity as the "variety of life," Dr. Gibbons said that biodiversity also encompasses processes such as biogeochemical cycles, biotec and abiotic responses to disturbances, and interactions among living organisms. Out of the 32 species of salamanders native to South Carolina, 16 are found at the Savannah River Site. Dr. Gibbons noted that the salamanders reflect the conditions of a wide variety of habitats. While passing several different varieties of salamanders around the room for the participants to see close-up and touch, Dr. Gibbons noted that landscapes are being altered and fragmented and ecological processes are being affected at a growing rate, resulting in a high rate of biodiversity loss. If it were not for "set-aside" areas such as Rainbow Bay, (an area protected from public assess, forest management, and most routine Site activities) long-term ecological research as well as reference areas for collecting data to compare with other areas would be greatly impacted. Several publications were shared with the participants including the *Snakes of Georgia and South Carolina* book, which is available from the Savannah River Ecology Laboratory, and a teacher's guide for *Wetland Wonders,* available from the Educational Outreach Program of the Savannah River Ecology Laboratory. When asked about any evidence of species mutations at the Site, Dr. Gibbons responded that mutations are not an unusual occurrence. However, Dr. Gibbons noted that mutations are genetic in nature and generally not caused by unusually high levels of radionuclides or periodic table elements.

Issues: Determine status of Rainbow Bay Study and if funding has been provided by DOE in response to the Carolina Bay Resolution developed by the CAB on September 29, 1998; determine if the shortnosed sturgeon has become an endangered fish species in the Savannah River.

Actions: Dr. Gibbons to present the Hidden Biodiversity at SRS presentation to full board on September 28, 1999; investigate DOE funding for the Carolina Bay studies; obtain copies of *Snakes of Georgia and South Carolina* and *Wetland Wonders* publications for interested stakeholders; link SREL homepage to the CAB homepage; research SSRS reports on the shortnosed sturgeon extinction in the Savannah River and provide copies to Sam Booher.

Additional Meeting Action Items: Provide Murray Riley with a hard copy of the Massmann Independent Scientific Peer Review (ISPR) report and Sam Booher with an electronic copy. **Final Public Comments:** None.

The meeting was adjourned at 9:00 p.m.

Meeting handouts may be obtained by calling 1-800-249-8155.