SRS Citizens Advisory Board

Environmental Remediation and Waste Management Subcommittee

Meeting Record December 9, 1997 Ramada Plaza, Augusta, GA

The CAB ER&WM subcommittee met on December 9, 1997 at the Ramada Plaza in Augusta, GA. CAB members present included, CAB ER&WM subcommittee Co-chairs Bill Lawless and Kathryn May and CAB member Karen Patterson. Todd Crawford, technical consultant to the CAB and CAB Facilitator Walt Joseph also attended. Attending from DOE-SR were Dale Ormond, Gary Little, Larry Ling, Roy Shepens, Ray Hannah, Howard Gnann, and Gerri Flemming. Craig Marriner and Sharon Cribb attended from the South Carolina Department of Health and Environmental Control (SCDHEC). Attending from WSRC/BSRI/BNFl were Sonny Goldston, Gerry Stejskal, Kelly Way, Bill Rajczak, Neil Davis, Jim O¹Conner, Dennnis Bickford, Joe D¹Amelio, Peter Hudson and Anne Roe. Joel Massmann and Laura Landover attended from the University of Washington. Public attendees included Murray Riley, Gerald DeVitt, Peter Gray, William McDonell, James Pope, Lee Poe and Patricia McCracken. Gerri Flemming attended as the Associate Designated Deputy Federal Official, ADDFO.

Bill Lawless opened the meeting and asked everyone to introduce themselves and asked if there were any public comments.

Trish McCracken noted that at Par Pond sanitary treatment sludge was injected into the ground through wells and requested information on the project. Gerry Stejskal and Todd Crawford said the unit was the Par Pond Sludge Land Application Unit and explained that "injection" in this case was only several inches below the ground surface, not in a well. Subsequent to the meeting additional information on this topic was sent to Ms. McCracken.

Bill Lawless asked Joel Massmann to say a few words about the recently completed Independent Scientific Peer Review (ISPR) of the Savannah River Integrator Operable Unit Study. Joel Massmann noted copies of the draft review were available and any comments would be welcome. The final report will be issued in March and presented to the CAB on March 24. Comments on the study were requested by January 23 and may be sent to Anne Roe.

Peter Gray presented his views concerning entombment and other associated cost saving recommendations. Mr. Gray said the Heavy Water Components Test Reactor (HWCTR) offers a good pilot for entombment of the production reactor¹s 105 buildings. Mr. Gray also said the space in the 105 buildings could be used for waste storage and disposal rather than the E Area vaults and would result in a considerable cost savings. Bill Lawless said the subcommittee would consider the proposal in more detail at the January 12 meeting.

Lee Poe discussed a proposed path forward on risk review and future land use. Mr. Poe recommended the ER&WM subcommittee be briefed on the kinds of risk assessment processes in use at SRS, the status of the future land use strategy, and what is needed to develop a more consistent approach to risk assessment and evaluation. The CAB ER&WM and Risk Management and Future Use (RM&FU) subcommittees will have a joint subcommittee meeting on January 12 to discuss these topics.

Regarding the Federal Facility Agreement (FFA) Schedules, Gerry Stejskal said that she was working with Todd Crawford on developing graphic performance measures to show ER progress on cleanup work and FFA milestones. Ms. Stejskal noted there was nothing to present at this time but after the graphs were completed they would be presented to the subcommittee on a continuing (quarterly) basis.

Joe D'Amelio gave an update on the SRS Transuranic (TRU) waste program. Mr. D'Amelio discussed the TRU waste program progress in 1997 and the program plans and initiatives for 1998. Mr. D¹Amelio noted that in 1998 the retrieval of drums, vent and purge operations, and efforts to raise the allowable curie drum content would continue in preparation for the opening of the Waste Isolation Pilot Plant (WIPP) in 1998. A WIPP audit of SRS TRU operations is scheduled for October 1998 with a goal of being ready to ship SRS waste to WIPP by April of 1999. Mr. D'Amelio also discussed transportation initiatives and the status of the Russian Hybrid Melter noting the project had been stopped because funding from the Office of Technology Development had been discontinued. Mr. Lawless asked for another update on the TRU waste program in November 1998.

Howard Gnann presented an update on the High Level Waste (HLW) program. He briefly discussed an overview of the system and the closure of Tank 17. He provided the various waste stream inventories and processing progress. He then outlined the activity at each HLW facility.

Mr. Gnann gave a background of the In-Tank Precipitation (ITP) chemistry and benzene reaction problems and the studies and lab tests that have been done to address the problems. Benzene release into Tank 48 vapor space was greater than expected; therefore, studies are being done to examine the following

- 1. Soluble Tetraphenylborate decomposition
- 2. Effect of catalysts
- 3. Catalyst inhibitors

The goal is to operate in the safest manner possible. SRS is also looking at alternatives, such as ion exchange, in the lab (SRTC).

With all SRS has invested, ITP still looks like the best system available. The challenge is to control and manage ITP because recovered tank space results almost entirely from the operation of ITP. Roy Schepens emphasized that the Number 1 priority is to get ITP up and running in order to get more tank space.

Next Mr. Gnann discussed DWPF canister production, sludge batches and precipitate. He mentioned how SRS is putting more glass in each can than initially planned.

Mr. Gnann went on to outline several accomplishments:

- DWPF melter pour spout improvements
- Working cheaper and more effectively
- Improved quality of glass
- Technology development for tank closure
- Tank 16 studies of waste in annulus
- Experimentation with fluidic sampler

Mr. Lawless asked for clarification/update/description of incidental/residual waste left in the tank and/or annulus, especially Tank 16 & radioactivity. These questions are examined in the Performance Review and must be answered.

Mr. Gnann went on to emphasize that closing Tank 19 remains a high priority.

Other accomplishments are as follows:

- Advances in the ion exchange, and remote manipulator arm technology studies with other sites.
- Studies of Saltstone vault alternatives
- HLW System Plan (Revision 8) (Mr. Lawless requested copies.)

Mr. Lawless then asked about the closure of the Tanks 17-20 "four pack" and offered any assistance desired. Mr. Davis said that it looks as though the finish date for a cluster of the first four tanks will be FY03. The biggest challenge is trying to balance priorities with the budget. Progress could be faster, but would take money from other things.

A draft of Revision 9 of the HLW System Plan has been started. Headquarters will be using Revision 9 in discussions with Congress regarding funding for the High Level Waste Program in the out years. Lee Poe questioned whether future canyon waste has been characterized and determined to be able to be processed such that the resultant glass could go to the repository. Mr. Davis reported that DWPF Waste Acceptance Criteria for vitrification will have to be met prior to accepting transfers from the canyons. HLW must know what waste is being sent to them. Further, the materials put into cans are modeled mathematically on every can produced. Any change is monitored and must be approved.

Bill Lawless closed the meeting at 9:30 p.m.

Attachments:

- Peter Gray Handout; Entombment and Cost Saving Recommendations
- Lee Poe Handout; Proposed Path Forward on Risk Review
- Letter Bill Reinig to Bill Lawless, January 4, 1998

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