



## **SRS Citizens Advisory Board**

Environmental Remediation &  
Waste Management Subcommittee

### **Meeting Record**

**May 7, 1997**

**North Augusta, S.C.**

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The CAB ER & WM subcommittee met on May 7, 1997 at the North Augusta Community Center in North Augusta, SC. CAB members present included Bill Lawless and Kathryn May, CAB ER & WM subcommittee Co-chairs, Karen Patterson and Suzanne Matthews. Walt Joseph, the SRS CAB facilitator, also attended. Attending from DOE-SR were Phil Prater, Will LaVeille, Nate Ellis, Mike Simmons, Cynthia Anderson, Robert Baker, and Bert Crapse. Brent Allen, Keith Collinworth and Mihier Mehta attended from the South Carolina Department of Health and Environmental Control (SCDHEC). Ken Feely attended from the U.S. Environmental Protection Agency (EPA). Attending from WSRC/BSRI/BNI were Gail Jernigan, Paul Huber, Steve Cowan, Thomas Kmetz, Mary Flora, Robert Van Pelt, Chris Bergren, Bill Maloney, Monica Jorque, Casey Knapp, Richard Strom, Anne Roe, Helen Villasor, Lori McCartney, Gerry Stejskal, Kim Wierzbicki, Ron Malonowski, Ron Steve, Bill Rajczak, Gerald Blount, Shannon Cheek, Jim Mason, Bob Sentelle, Leslie Huber and John Gladden. Public attendees included Trish McCracken, Paula Joseph, Michael Quinlan, David Kosson, Carl Schopper, and William McConell. Gerri Flemming attended as the Associate Designated Deputy Federal Official, ADDFO.

Bill Lawless opened the meeting and asked Les Germany, DOE-SR Waste Area Group manager for the L area units, to present the briefing on the L Area Oil & Chemical Basin and L Area Acid/Caustic Basin (LAOCB/LAACB) proposed plans for remediation which he had presented at the SRS Information Exchange public meeting held immediately before the subcommittee meeting. Mr. Germany explained the LAOCB/LAACB units, their characteristics and history, the results of characterization studies, the risks involved with the units, and the selected alternative remedies for the units. The discussion that followed concerned the vegetation removal, the land use scenarios used in calculating unit risk, and the technical aspects of the planned remediation. It was noted that the LAOCB is the second highest ranked unit in the ER program in terms of risk. The preferred alternative of in situ stabilization and a soil cover for the LAOCB would be protective of human health and the environment by reducing the threat of continued release of radionuclides to the environment.

Will LaVeille gave an update on the Technology Deployment Initiative (TDI) which is a complex wide multi-year program with a proposed allocation of \$50 million dollars for FY98. TDI is specifically targeted for technology deployment to help expedite cleanup at DOE sites, reduce the EM mortgage, and accelerate achievement of Ten-Year Plan goals. Mr. LaVeille explained that SRS was the lead site on twelve TDI proposals and the proposals were being

reviewed by a Red Team composed of six individuals. Mr. LaVeille noted the proposals were due to DOE Idaho on May 12 and the announcement of the selected proposals was scheduled for May 25, 1997. Bill Lawless noted that he had spoken with Todd Crawford, who is a member of the proposal review team, and Dr. Crawford said the proposal review had been completed.

Phil Prater, a DOE-SR Senior Technical Advisor for the ER Program, explained the overall ER groundwater strategy for SRS Resource Conservation and Recovery Act (RCRA) units. Mr. Prater introduced the upcoming groundwater remediation presentations from the respective waste area group managers by explaining that the ER groundwater cleanup program was governed by the RCRA permit. Mr. Prater said the groundwater cleanup strategy was unit specific, technology driven, and involved a phased approach to remediation. Robert Baker, DOE-SR Waste Area Group manager for the F & H Area groundwater remediation program, discussed the F and H project background, approach, and project initiatives. Mr. Baker explained the F & H Seepage Basins had operated from 1955 to 1988 and were closed in 1991. The principal groundwater contaminants include tritium, metals and other radionuclides. Mr. Baker showed the groundwater contaminant plumes and explained the F & H remediation program involves a three phased approach:

Phase I: Construct and operate water treatment system to provide hydraulic control of the tritium plume and removal of other contaminants; the F-Area system was started in April 1997 six months ahead of schedule and the H-Area system is forecast to start up in July.

Phase II: Evaluation and optimization of Phase I systems and establishment of clean up goals.

Phase III is the continued system operation until remediation goals are reached.

Mike Simmons, DOE-SR Waste Area Group manager for the A/M groundwater remediation program, described the project background, approach, and future project direction and initiatives. Mr. Simmons explained the groundwater contamination was identified in 1981, the principal contaminants are solvents (trichlorethylene, TCE, and tetrachloroethylene, PCE), and the clean up is governed by the RCRA Part B permit issued in 1987. Mr. Simmons showed the groundwater contaminant plumes and noted the plume is approximately 1500 acres in size and is located in multiple aquifers. He said the project approach was to control and cleanup the plume by focusing on the areas of highest concentration first, locate and remove the sources, and optimize the use of baseline and innovative technologies. Mr. Simmons noted that to date 11% of the estimated 3-1/2 million pounds of solvents believed to have been released to the environment have been removed. He noted that the rate of solvent removal had been accelerated greatly by the introduction of soil vapor extraction units in 1995. Mr. Simmons said that one of the initiatives currently being worked was to develop and apply treatment for the solvents TCE and PCE in their pure phase, a form called Dense Non-Aqueous Phase Liquids (DNAPL). These DNAPLs sink to the bottom of the aquifer and dissolve into the groundwater at a slow rate. If these pools of DNAPL could be located and treated the clean up could be expedited. Bill Lawless asked how long the cleanup would take. Mr. Simmons explained it would depend on whether alternate concentration limits could be negotiated with the regulators and on the effectiveness of existing and new remediation technologies deployed in the A/M Area.

Bert Crapse, DOE-SR Waste Area Group manager for the MWMF groundwater remediation program, described the project background, regulatory approach, and the contaminant plumes.

Mr. Crapse said the Mixed Waste Management Facility (MWMF) groundwater is underneath the burial ground complex which includes the Old Radioactive Waste Burial Ground, the E-Area Vaults, the Mixed Waste Management Facility and the Low Level Radioactive Waste Disposal Facility. The groundwater contamination was identified in 1981 and the cleanup is governed by the RCRA Part B Permit. Mr. Crapse explained there are four distinct plume areas. The two TCE plumes cover an area of approximately 100 acres and the two tritium plumes cover an area of approximately 200 acres. Other contaminants include mercury, PCE and uranium. Mr. Crapse explained that a RCRA permit application request for an Alternate Concentration Limit/Mixing Zone (ACL/MZ) for the MWMF groundwater unit had been filed with SCDHEC in 1996. The purpose of the ACL/MZ request is to allow for an adjustment to the concentration limits of designated contaminants. In conclusion, Mr. Crapse noted that the MWMF groundwater cleanup was in the early stage and had not yet progressed to the point of deploying full scale cleanup technologies.

Bill Lawless discussed the proposed contract with Joel Massmann for an Independent Scientific Peer Review (ISPR) of Tank 20 closure and the A/M, F & H, and MWMF groundwater cleanup projects. It was pointed out that an ISPR of F&H groundwater cleanup had already been conducted by Dr. Massmann. Mr. Lawless said this would be a follow-up of F&H project progress and not a full ISPR.

The draft motions were handed out and comments were requested. Cynthia Anderson and Keith Collinsworth noted that the Watershed Remediation and Integrator Operable Units draft motion called for actions which they felt were already being pursued by the agencies. Ms. Anderson noted the use of plug in Record of Decisions (RODs) and the grouping of waste units by watershed in the SRS Federal Facility Agreement. The schedule in the SRL Seepage Basins draft motion was also discussed and it was agreed that a less proscriptive schedule would be included. Mr. Lawless requested comments on the motions and closed the meeting at 8:45 p.m.

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