



SRS Citizens Advisory Board

Environmental Remediation & Waste Management Subcommittee

**Meeting Record
October 27, 1997**

The CAB ER & WM subcommittee met on October 27, 1997 at the North Augusta Community Center in North Augusta, SC. 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 also attended. Attending from DOE-SR were Tony Polk, Phil Prater, and de'Lisa Bratcher. Michael Moore attended from the South Carolina Department of Health and Environmental Control (SCDHEC). Attending from WSRC/BSRI/BNFL were Sonny Goldston, Bob Aylward, Steve Crook, Ken Hofstetter, Paula Cable, Helen Villasor, Bill Rajczak, and Anne Roe. Public attendees included Mike French, Lee Poe, Dale Kemp, Gerald DeVitt, and Patricia McCracken. de'Lisa Bratcher attended as the Associate Designated Deputy Federal Official, ADDFO.

Karen Patterson opened the meeting and asked everyone to introduce themselves.

Ms. McCracken commented on the use of foreign companies and questioned whether BNFL had an environmental insurance policy.

Phil Prater and Bob Aylward gave a presentation on the SRS Environmental Restoration Early Action Strategy. Mr. Prater explained the Early Action Strategy was developed in concert with SCDHEC and the Environmental Protection Agency to have an agreed upon comprehensive strategy for identifying opportunities to perform early actions. In the past EPA and SCDHEC had raised concerns over the appropriateness of proposed early actions; therefore, it was determined that a structured approach was needed to provide consistency in decision making. This resulted in a decision tree in which each step in the decision making process had been evaluated and agreed to by all three agencies. Mr. Prater explained that the decision tree was divided into color coded sections and was subdivided into a series of gates or decision points identifying key criteria to determine if an early action is appropriate. The Early Action Strategy decision tree also has decision points to determine if an early action is practical and what type of early action should be used. If an early action is not appropriate, the strategy recommends a comprehensive operable unit remedy selection process.

Bob Aylward covered the Early Action Strategy decision tree key components and layout. He explained that the green section is the starting point and if you have a yes answer to any of the green coded decision points an Early Action is appropriate. Then you proceed to the blue coded

section which asks the question; Is an Early Action Practicable/Implementable? Mr. Aylward noted this is where it is determined whether an Early Action can be performed and it is here that agreement is reached early in the process among the three agencies. Mr. Aylward said the types of questions asked at the blue coded Practicable/Implementable (Can an Early Action be performed?) section covered issues such as:

- Is there sufficient information and data available to proceed?
- If there is not sufficient data; can the data be gotten easily?
- Can the clean-up objectives be identified?
- Are the Early Action objectives consistent with the long term or final objectives for clean-up?

As an example, Mr. Aylward noted that an Early Action might be considered to grout one foot of contaminated soil in a unit to prevent the spread of contamination to the groundwater. But it would have to be determined that soil grouting would be consistent with the final action and the final action schedule for the unit before the early action could proceed.

Mr. Aylward also noted that budget availability, scopes of work, and schedules had to be closely coordinated to ensure that overall environmental program objectives could still be achieved.

The next section of the Early Action Strategy decision tree covered was the purple coded section which asks the question; What type of Early Action is appropriate? Mr. Aylward explained that the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) which is the implementing regulation for CERCLA, (the Comprehensive Environmental Response, Compensation and Liability Act), gives criteria for Early Actions such as Removal Actions as well as criteria for the comprehensive Remedial Process. He said the comprehensive Remedial Process generally took three years from the Feasibility Study to the Field Start. Mr. Aylward said that typically Early Actions are performed when:

- You understand what you have in terms of contamination,
- When there are a limited number of alternatives
- When hazardous materials are contained in drums or other containers that could leak and release their contents to the environment
- When there is an actual or potential exposure to nearby workers or animal populations
- When you can treat discrete media, such as a finite amount of soil

Mr. Crawford asked if any of the SRS CERCLA units listed in the Federal Facility Agreement had been completed and taken off the books. Mr. Aylward said that to date none of the units had been completed and taken off the books.

Next, Mr. Aylward covered the three types of Removal Actions, which are:

- Emergency Removal Actions which must be done in a matter of hours or days and are typically not used in the SRS Environmental Restoration program
- Time-Critical Removal Actions which allow for a six month period to plan and initiate the action. The main question asked for time-critical removal actions is: Is the threat

significant enough that it could not wait three years (the time required for the comprehensive Remedial Process). Mr. Aylward noted that public involvement is incorporated by making the Removal Site Evaluation Report (RSER) available for public review.

- Non Time-Critical Removal Actions involve a timeframe of from 6 months to 2 years and require the completion of an Engineering Evaluation/Cost Analysis report (a smaller version of a Feasibility Study) before proceeding with the removal action. Mr. Aylward noted that SRS has never used this type of removal action.

In summary, Mr. Prater and Mr. Aylward noted that the Early Action Strategy would be used by the three agencies and would be incorporated in the Federal Facility Agreement (FFA) Implementation Plan (FIP). The FIP is a cookbook of standard protocols which are agreed to and used by the three agencies in implementing the SRS ER program. They said the strategy would be applied to the FFA Appendix C operable units at the initiation of the Remedial Investigation (RI) and other appropriate points in the RI/Feasibility Study (FS) process. The decision to pursue an early action will be documented and will follow an established protocol.

Questions and discussion on the SRS Environmental Restoration Early Action Strategy included public involvement opportunities, the possibility of using a computer to record and track the decision points in the EAS, the FFA public involvement history, and the origin of combining the Resource Conservation and Recovery Act (RCRA) and CERCLA activities at SRS.

Mr. Jim Ullery, Southeastern Technology Center (STC), gave a presentation on the Field-Deployable Tritium Analysis System (FDTAS) Demonstration scheduled for November 12 at the Highway 301 bridge over the Savannah River. Mr. Ullery noted that Ken Hofstetter and Paula Cable of the Savannah River Technology Center (SRTC) had researched and developed the tritium monitor. Mr. Ullery also recognized Gary Hollmann, President of the Southeastern Technology Center and Milton Gordon, the project engineer for the demonstration.

Mr. Ullery explained that the Southeastern Technology Center was a nonprofit organization in Augusta whose mission was to facilitate technology deployment from government agencies to the private sector and thus create jobs in the CSRA region. Mr. Ullery discussed seven projects in which STC had performed technology demonstrations during the last two years in the environmental area. These technologies had been deployed through a cooperative agreement between STC and DOE-SR to provide technology demonstrations at local disadvantaged sites using local small or small/disadvantaged businesses.

Mr. Ullery said that STC had received \$18K dollars from the DOE-HQ Environmental Justice group to conduct the demonstration of the Field-Deployable Tritium Analysis System (FDTAS) in the Savannah River at the Hwy 301 bridge. Mr. Ullery said SCDHEC, the Georgia Department of Natural Resources, and the Nuclear Regulatory Commission would be invited to attend the November 12 FDTAS demonstration. Other potential attendees included Savannah River water customers in Jasper/Beaufort, Hilton Head, and Savannah, other DOE Sites, potential industrial partners, the SRS Citizens Advisory Board and the media.

Mr. Ullery said the FDTAS demonstration was important because in the past there had been tritium releases to the Savannah River and downstream users could be impacted by future releases. He noted the advantage of the FDTAS was that it could provide near real-time (within 20 minutes) data as compared to the existing sampling system, which requires one and half to two days for data collection and analysis. Mr. Ullery said in essence the FDTAS would provide the stakeholders and downstream water users with peace of mind by providing early notification of any inadvertent tritium releases. He noted the technology needed further development to increase durability and cost efficiency before permanent deployment occurs.

Mr. Ullery also discussed the activities STC would perform after the demonstration including issuing a report on the technology performance, stakeholder input, potential permanent installation and commercialization. He said STC would work to leverage resources for further development and installation of a permanent system in the Savannah River. He noted several manufacturers were interested in locating in the CSRA and STC would facilitate this economic development in the local area.

In summery, Mr. Ullery said the FDTAS demonstration shows DOE efforts to develop technologies in response to stakeholder and regulatory concerns that can benefit everyone. He said it also provides an opportunity for stakeholders to see specific application to their needs and encourages participation (a win-win for everyone).

Questions and discussion covered the sensitivity of the instrument (it is more sensitive than the technology currently being used), previous testing (it has been tested at A/M area, Brookhaven National Laboratory), and if it can detect other contaminants (it only detects tritium). Bill Lawless noted the CAB would be interested in an abbreviated version of the STC presentation describing the projects STC is involved with in the technology deployment arena.

Bill Lawless introduced Sonny Goldston, WSRC, who provided a brief review of DOE Complex-Wide Environmental Management Integration (EMI) and the waste streams that have been previously discussed and reviewed by the CAB. These waste streams include Mixed, Transuranic, and Low-Level Wastes and the Consolidated Incineration Facility (CIF). Mr. Goldston also mentioned the recommendations that had been previously presented to the Citizens Advisory Board in Beaufort, SC, at which there was not a quorum present for voting. Mr. Goldston noted that a vote on the motions is expected at the November full CAB meeting in Barnwell, SC on November 17. Bill Lawless noted that the recommendations need to be reviewed once again at the the November 17 meeting prior to voting.

Mr. Goldston mentioned that DOE proposes to move forward with EMI in concert with the CAB recommendations and confirmed that SRS is working in concert with the South Carolina Department of Health and Environmental Control (DHEC) on regulatory permitting issues. Mr. Goldston then introduced Tony Polk, DOE-SR, who discussed CIF treatment of low-level aqueous waste from Brookhaven National Laboratory in New York.

Mr. Polk said the CIF Resource Conservation and Recovery Act (RCRA) permit specifically excludes incineration of low level waste (LLW) streams not generated at SRS and then discussed the transportation agreement that requires state notification of low-level waste shipments.

However, Mr. Polk stated that the CIF has capacity to burn off-site waste in addition to SRS waste and noted that there are incinerable LLW streams available from other DOE sites which supports DOE complex integration efforts for best utilization of DOE facilities and funds. Mr. Polk concluded his discussion by saying that the DOE-SR path forward for authorization to incinerate low-level waste and mixed low-level waste from other DOE sites under development includes working with SCDHEC to obtain agreement to allow incineration of off-site low-level waste at CIF. Waste from Brookhaven National Laboratory could be incinerated at CIF by Fiscal Year 1998 if a major modification process is not required.

Mr. Lee Poe asked if the waste under discussion was low-level waste and not mixed waste. Steve Crook, the Solid Waste Division Lead on Environmental Compliance for waste management facilities, responded that the 68,000 gallons of Brookhaven Laboratory waste contained tritium and minimal amounts of other constituents. (A copy of the organic and inorganic compounds in the Brookhaven National Laboratory waste are attached to these minutes.) In response to Mr. Poe's question if the waste was listed waste, Mr. Crook confirmed that the waste is not listed waste. Mr. Poe also asked why the waste should be incinerated and not evaporated. Mr. Crook explained that since there were organic constituents the proper method of disposal in this case is incineration. Because there is no salt in the waste, an evaporator would not destroy the waste. In response to Mr. Poe's question as to whether the National Environmental Policy Act (NEPA) governs CIF, Bill Lawless asked Mr. Goldston and Mr. Polk to carefully examine the NEPA document..

Ms. Trish McCracken asked that SRS identify an expert at the Brookhaven National Laboratory to provide more information on the low-level waste. A discussion on policy issues developed and the question arose on whether a major permit modification would be required under a public comment period process. There was a response; public notification for minor modifications on low-level waste is not required under RCRA.

Other discussion included the need to coordinate EMI activities with the upcoming issuance of Records of Decision for the various waste streams under the Programmatic Waste Management Environmental Impact Statement (PEIS) which was noted by Lee Poe. Also noted were regulatory concerns with parity, and whether there was a firm commitment to complete closure of the HLW tanks by 2028. Dale Kemp expressed his opinion that the CAB did not represent him because he had not voted for the CAB members.

Karen Patterson noted that the subcommittee should remain available after meetings to allow for additional discussions with the public so that their issues can be fully addressed.

Bill Lawless closed the meeting at 9:15 p.m.

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