



SRS Citizens Advisory Board

Environmental Remediation and
Waste Management Subcommittee

Meeting Record August 27, 1997

The CAB ER&WM subcommittee met on August 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 Karen Patterson, Suzanne Matthews, and Ken Goad. Todd Crawford, technical consultant to the CAB also attended. Jeff Crane, SRS Remedial Project Manager, attended from the U.S. Environmental Protection Agency. Attending from DOE-SR were Virgil Sauls, Mike Simmons, Gary Little, Tony Polk, Virginia Kay, and Brian Hennessey. Cecilia Deprete attended from the South Carolina Department of Health and Environmental Control (SCDHEC). Attending from WSRC/BSRI/BNI were Sonny Goldston, Paul Huber, Ron Steve, Mike Griffith, Rick Geddes, Chris Bergren, Helen Villasor, Peter Hudson, Ron Socha, Gerry Stejskal, and Anne Roe. Public attendees included Lee Poe, Peter Gray, William R. McDonnell, Sam Booher, Pam Brammer, Carl Mazzola, Tony Tucker, Jeanette Smith, Gerald Devitt, Bob Overman, and Patty Tucker. Virginia Kay attended as the Associate Designated Deputy Federal Official, ADDFO..

Bill Lawless opened the meeting and asked everyone to introduce themselves.

Brian Hennessey, DOE Federal Facility Agreement (FFA) Project Manager, gave an update on current activities which are being undertaken to expedite the remedial process or cleanup of SRS. He discussed six avenues being used to expedite the remedial process. Mr. Hennessey explained that after a release of contamination had been found at a unit there was normally a detailed procedure followed to arrive at a Record of Decision (ROD) for remedial action. Mr. Hennessey noted that a new process, the Plug-In ROD approach, is being developed to apply to not a single release unit but to a category of release units. For example, radiologically contaminated seepage basins, which are ponds or lagoons that received wastewater from the separa V°ocess or the reactors, is a category of waste units that could utilize the Plug-In ROD approach. Mr. Hennessey said in this example the Plug-In ROD approach would address all the radioactive basins and allow several units to use the same ROD. He said the Plug-In ROD approach could accelerate the documentation process by as much as 24-months.

Lee Poe asked how stakeholder involvement will be obtained in the Plug-In ROD approach. Jeff Crane explained that at a minimum the proposed plan would go out for public review and comment and the opportunity to hold a public meeting is available if interest is expressed. Mr. Crane said they may also consider holding a public meeting to explain the Plug-In ROD approach. Bill Lawless asked if there was a set of units using the Plug-In ROD approach which

the Subcommittee could review. Gerald Devitt asked how the characterization of the units was handled as a group. Mr. Hennessey explained that some characterization would be done at each of the units in a Plug-In ROD category. Jeff Crane noted there was a one page summary which explained the Plug-In ROD approach as well as a notebook sized document that covered the Plug-In ROD approach in detail. A copy of the one page summary is attached.

Next, Mr. Hennessey discussed the Pre-Workplan Characterization approach to expediting the remedial process. He explained that normally when a waste unit is characterized (sampled to find out what contamination is present and how it could be cleaned up) the first step is to develop a sampling workplan and review the plan with the regulators for their approval before beginning sampling. The Pre-Workplan Characterization approach involves taking a limited number of samples before discussing the workplan so some sample data is already available when all the parties sit down together to scope the cleanup strategy for the unit. This approach also allows cleanup to proceed based on a limited number of samples.

The third approach for expediting cleanup, Mr. Hennessey explained, was the use of standard Remedial Investigation/Baseline Risk Report outlines. The standard outlines reduce preparation and approval times. As a byproduct of developing the standard outlines, overall communication between technical counterparts is also improved.

The fourth approach Mr. Hennessey discussed was the use of on-site laboratories for analyzing contaminant samples on a real-time basis. Mr. Hennessey noted that in the cleanup of a waste unit extensive sampling is often required. He said sampling could require 30 or more samples each of dozens or even hundreds of chemicals and that these samples have to be taken, packed, and shipped to off-site laboratories for analysis. The turnaround time to receive the results of these samples is often a week or more. But Mr. Hennessey said a contract had recently been let to have this analytical lab work done on site with a one day turnaround on most samples. Mr. Hennessey noted that this also allowed the Site not to have to preselect the sampling locations and allowed for faster, more efficient decision making. Bob Overman, public citizen, noted that there were standard methods for selecting sample locations. Lee Poe asked if the use of an on-site laboratory saved money. Mr. Hennessey replied that it saved both money and time.

The fifth approach Mr. Hennessey discussed for expediting remediation was the use of the same cleanup approach (Approved Standardized Corrective Action Design, ASCADTM) for several waste units. The units were the C, P, K, F Coal Pile Runoff Basins which were all cleaned up in the same way using a removal action process. The cleanup also resulted in some of the coal being recycled and reused by a private company as road bed material. Bob Overman asked why the cleanup was necessary and it was explained that the cleanup was needed to protect the groundwater. Mr. Overman then asked if these levels of contamination requiring cleanup were the same for coal fired commercial power plants throughout the country. Further, Mr. Overman cited the case of a Missouri project in which recycled materials from a CERCLA site had been used in building a road. He said later the materials were found to contain high levels of dioxin and the road had to be taken up and the contaminated materials properly disposed of. Mr. Overman questioned if the recycled coal containing alpha emitters from the SRS Coal Pile Runoff Basins and also being used as road bed material could have the same type problem as the Missouri case. Ron Steve, WSRC Program Manager for the Reactor Areas including the Coal

Pile Runoff Basins, said that the recycled coal was treated and combined with other materials before it was used in roads so that it did not present the same problem as the Missouri case.

In terms of why these expedited cleanups such as the Coal Pile Runoff Basins were being pursued, Jeff Crane noted that in the past EPA had been criticized for not allowing faster action on cleanups. He said this had resulted in the establishment of what he termed a "Bias for Action" at the EPA, and he explained this entailed taking a reasonable/practical approach to cleanup and recognizing that some sites are not as bad as others and do not require the same rigor or need for looking at a wide range of cleanup alternatives.

Lastly, Mr. Hennessey discussed an "Early Action Strategy" which was being prepared by EPA, SCDHEC, and DOE. He said the Early Action Strategy is not as rigorous as the current cleanup protocols and would enable the three parties to get to the field work portion of the cleanup sooner. Todd Crawford asked if the soils underneath the coal piles had been studied. Subsequent to the meeting, Jim Mason, ER Engineering, was contacted on this question. Mr. Mason said these soils were not sampled since the area was not part of a RCRA/CERCLA unit. He explained that the soils underneath the coal piles were generally of a hard packed clay. The design of the coal pile runoff basins was such that the runoff from the coal piles preferentially flowed to the runoff basins and did not infiltrate substantially beneath the coal piles. Thus the highest point of contamination was in the runoff basins. Mr. Mason noted that after the coal was removed from the coal piles the soil was prepared for a soil cover and lime and fertilizer were added to promote growth and neutralize excess soil acidity. Sam Booher asked if SRS had looked at how other sites are cleaning up their seepage basins and other waste sites. It was noted that the jet grouting process being used to stabilize radionuclides in the L-Area Oil/Chemical Basin had been used at the Idaho site and it was studied. Mr. Booher said he thought the DOE Sites should share cleanup information with each other and learn from what other Sites are doing in their cleanup activities.

Mike Simmons, DOE Waste Area Group Manager for A/M Area Projects, discussed the Savannah River Laboratory (SRL) Seepage Basins project ; . Mr. Simmons began by reviewing the SRL Basins history and background. He noted the primary concern is the dilute solutions of radionuclides which were discharged to the basins over a 28 year period. The basins were removed from service in 1982. In 1993 a Resource Conservation and Recovery Act (RCRA) Closure Plan to grout the basins in place and the 9 s proposed. But this plan was rejected and a decision to follow the RCRA/CERCLA process was made in 1994. CERCLA, the Comprehensive Environmental Response, Compensation and Liability Act is an environmental law which governs the cleanup of waste sites. RCRA governs the disposal of hazardous waste.

Mr. Simmons explained that the CAB had recommended that SRS establish a focus group to explore ways to accelerate cleanup and to provide updates on the SRL Seepage Basins remediation. A consensus emerged among focus group participants at the July 21 meeting on a dual path forward. Bill Lawless recalled that Keith Collinworth, SCDHEC FFA Project Manager, had suggested narrowing the remedial options by looking at two options (1) in situ remediation and (2) ex situ remediation. Sam Booher asked if there were other sites similar to the SRL Seepage Basins. It was noted that the basins could form the basis for a plug-in ROD.

Mr. Simmons reviewed the actions (sampling and analysis, and the vegetation removal report preparation and ongoing removal of the contaminated vegetation) that had taken place in the last year at the SRL Basins. He noted there were still issues with the disposal of the contaminated vegetation. Bob Overman asked how the contamination of the vegetation being removed at SRL compared with the vegetation at the Horse Creek Plant. Karen Patterson asked if the Tims Branch vegetation had been sampled and noted there should be concern with the state of the Tims Branch. It was noted that Tims Branch was not at risk.

Jeff Crane said that the SRL unit was unique in its close proximity to the SRS boundary. Mr. Crane noted that the SRL Seepage Basins had been part of a study for a Soils/Debris Consolidation Facility which would have consolidated contaminated materials to a centralized facility. Mr. Crane explained that some of the broader goals that were considered in evaluating units such as the SRL Seepage Basins, were the reduction of the "footprint" of contaminated areas and the mortgage reduction costs gained by cleaning up units to a level that would not require extensive monitoring or maintenance. Mr. Crane noted that these programmatic issues were part of the evaluation process.

Paul Huber, Bechtel Savannah River Inc. (BSRI) ER Project Manager for A/M Area Projects, then discussed the present status of the SRL Seepage Basins. He noted that two remedies appear feasible and that SRS is no longer considering a removal or interim action as a means of remediating the SRL Seepage Basins. Mr. Huber described the options from the Focus Group meeting; with one option being a limited removal of soils and then backfilling the basins to grade with clean soils. Mr. Huber said this would eliminate most contaminants and achieve significant risk reduction. Mr. Huber noted the feasibility of off-unit soil disposal is being evaluated. The second option would be no removal of soils and a backfill with soil to grade (this could be a RCRA type closure with an engineered cover/cap). In the second option the risk would be reduced through engineering controls, (i.e. signs posted, cover designed to reduce rainwater infiltration and encourage runoff). Sam Booher asked about the basin cap. Paul Huber said they would look at what an appropriate backfill would be required to limit infiltration to the point to keep contamination mobilization such that it would not be a migration problem. In that analysis, if more soil cover than fill to grade at the appropriate compaction level proved to be necessary, then a cap would be a way to increase the cover.

Mr. Huber said that work on the SRL Seepage Basins cleanup investigation and analysis documentation was underway. He said that an extensive outline of the documents needed for the cleanup had been prepared and four of the chapters had been written. The document was scheduled for submittal to EPA and SCDHEC on December 3 for their review. Bill Lawless said that the subcommittee would be interested in receiving a review copy of the document by November 10. Mr. Huber said he did not know if that was possible because the schedule for completing the document was very rigorous. Mr. Huber explained the document was being prepared by six authors, contained over 50,000 data points and would probably be 500 pages long. Lee Poe and Karen Patterson questioned whether the subcommittee was interested in or had the time to review such an extensive document. Subsequent to the meeting Mr. Lawless said that the subcommittee could wait and receive the draft documents on December 3rd, but would go ahead with a project review around November 10.

Lee Poe noted that he had not received a summary of the July 21 SRL Seepage Basins Focus Group Meeting as he had expected. Mr. Huber said the draft summary was being prepared and would be mailed out this week.

Tony Polk provided a status report on the Consolidated Incineration Facility (CIF) and explained that the CIF is currently operating and is burning solid, aqueous and blended waste. In response to the CIF privatization issue, Mr. Polk said that consideration for mission priorities resulted in a DOE decision to place privatization of CIF on hold. Some of the reasons Mr. Polk cited were that resources are being better utilized for priority work and a possibility exists to take advantage of CIF's capacity under the Environmental Management Integration (EMI) initiative. Mr. Polk added that DOE may revisit privatization again in two to three years.

Mr. Lee Poe asked if DOE could speak to the positive benefits and negative outcomes of privatization. Mr. Polk responded that there are DOE-EM documents that provide information on DOE's position on privatization. It was noted that several of the documents have been downloaded from the DOE-HQ Web Site and provided to Mr. Todd Crawford for review.

Mr. Polk also discussed the SRS consolidation of CIF, the Effluent Treatment Facility (ETF) and Saltstone and added that the expected cost savings of this consolidation would result from cross-trained operators, consolidated training and maintenance, and campaigned operations of the facilities. This consolidation amounts to a reduction in jobs.

W. T. (Sonny) Goldston began his review of the status of Complex-Wide Environmental Management Integration (EMI) by explaining that the EMI initiative is a result of Al Alm's request to examine waste management on a complex-wide basis to determine how it can be managed cheaper, faster, and better. EMI answers questions such as what type of waste and how much waste is located at each site, what are the existing treatment facilities and what is the capacity of those treatment facilities. EMI is also an opportunity to improve the "Accelerating Cleanup: Focus on 2006" plan objectives and include stakeholder input on recommendations.

Mr. Goldston discussed his participation in a teleconference call earlier in the day with Dr. Sam Kelly, Solid Waste Division Vice President and a member of the EMI Steering Committee. During the conference call, CAB recommendations on EMI from across the complex were discussed and plans were made to include EMI on the National Stakeholder's Conference agenda. In response to Bill Lawless's question as to who will be attending the National Stakeholder's Conference, the DOE-SR Associate Deputy Designated Federal Officer (ADDFO), Virginia Kay, commented that the meeting has been postponed.

During the Steering Committee's teleconference, Mr. Goldston said an Idaho CAB meeting to discuss EMI recommendations from Site Specific Advisory Boards (SSABs) will be held on September 16, 1997. Hanford is also planning to present an EMI recommendation and has been invited to attend this meeting. Bill Lawless asked if the SRS CAB is being invited or if there used be an opportunity for the CAB to participate via conference call.

Sam Booher asked if there is communication among the SSABs where all of the recommendations are being shared. Ms. Kay said that courtesy copies of the recommendations

are traditionally shared among the complex SSABs. However, with the advent of the Internet, some SSABs post their recommendations on their home pages. (The SRS CAB was cited as a good example of providing excellent information on the Internet.) Members of the public were provided with instructions on how to access the SSAB home pages, including SRS.

Mr. Goldston concluded his presentation by polling the attendees to determine if a "nuts & bolts" meeting would be beneficial to fully review and discuss EMI. It was determined that a full two-hour meeting should be held on September 3, to discuss EMI and the specific implications it has for SRS concerning mixed waste, transuranic waste, low-level waste, and the use of CIF for mixed DOE waste incineration.

Rick Geddes raised the question why Nuclear Materials (NM) is being excluded in the EMI presentation. Bill Lawless requested an action that at the September 3 meeting, representatives from NMSP will be in attendance to respond to questions. The last item on the meeting agenda was a discussion of issues for the Subcommittee to consider in future meetings. A list of issues was handed out which included:

1. ER Early Action Strategy (this topic provides a summary of current efforts to accelerate the pace of cleanup at SRS through the use of early and interim actions, and is responsive to CAB Recommendation No. 35). The timeframe for subcommittee consideration is October or November.
2. ER Strategic Plan (this topic will provide an update on efforts to develop strategies for the ER program; including groundwater, surface unit and integrator operable units). It was pointed out that this plan is different from the ER Management Action Plan (MAP) because it is more detailed and will eventually replace the MAP. The timeframe for subcommittee consideration is September or October.
3. Risk Review (this topic will update recent efforts to improve the risk ranking of ER units which in turn supports the revisions to the prioritization of work within the ER program. Key to the improvements in risk ranking is the use of recently completed information from risk characterization and baseline risk assessment efforts). ER risks must not be different from waste management risks. The timeframe for subcommittee consideration is September or October.
4. Plug-In Records of Decision (RODs) - Plug-In RODs are viewed as a way to expedite in the field remediation by reducing the paperwork associated with individual units. This approach allows the development of one document that governs the preliminary work associated with multiple similar units.

Mr. Lawless said the subcommittee would like to look at this issue along with an applied example, such as the seepage basins, around September 15th. He noted that the Plug-In ROD approach result from the Integrator Operable Unit studies and the Watershed Remediation approach that Joan Baum, DOE, had presented to the Subcommittee back in April.

5. Misc. Chemical Basin/Metals Burning Pit CMS/FS Scoping (the CAB Recommendation No. 2 provides for stakeholder involvement at this point of the Feasibility Study Process) The timeframe for subcommittee consideration is January 98

6. TNX Unit CMS/FS Scoping -the CAB Recommendation No. 2 provides for stakeholder involvement at this point of the Feasibility Study Process. The timeframe for subcommittee consideration is February 98. Mr. Lawless noted that items 6 and 7 should be scheduled in time to allow for motions to be carried forward on the units.
7. Decommissioning of the Ford Building (some preliminary investigation has been conducted at the Ford Building and additional actions could be considered). The timeframe for subcommittee consideration is October or November 97
8. Transuranic (TRU) Waste Update - The subcommittee has been involved in the issues surrounding the TRU Waste at SRS and would like to continue receiving information on the various options being considered for the treatment of TRU waste. It was noted that the Russian Melter would also be reviewed in conjunction with the TRU waste.

Mr. Lawless then noted other topics he would like to be addressed including an update on the ISPR of the Savannah River Integrator Operable Unit Study, an update on the Site Treatment Plan, a follow-up to mixing zone applications for the Mixed Waste Management Facility and other groundwater units. Mr. Lawless opened the floor to suggestions and requested topics from attendees. Topics mentioned included more information on the Privatization issue and how DOE views the issue. A review of the various strategic plans was suggested including the ER, Waste Management, and SRS Strategic Plan. It was noted that the decommissioning of three experimental reactors would be discussed at the September meeting and Peter Gray, public citizen, and Todd Crawford, CAB Technical Advisor, would be working together to prepare a draft motion for the subcommittee to review. Bill Lawless also pointed out that the follow-up update on the decommissioning of the Heavy Water Components Test Reactor, (HWCTR) had been requested for August and he was still expecting to address this item. Other topics included the Duratek Melter, beneficial reuse, stream reclassification, and the next early action subject. A suggestion from the public is to have an archaeological review of closure symbols to warn future generations.

Lee Poe noted that he would like the subcommittee to review the progress on the F and H Area Seepage Basins Groundwater remediation project. Mr. Lawless noted the F And H project team needed time to collect data and said he thought that it might be appropriate to look at in mid-1998. Mr. Poe also said the topic of risk management reduction and how risk is considered would be a good topic for the subcommittee. Other topics included the Defense Waste Processing Facility, the shipment and disposal of High Level Waste canisters from the DWPF process, productivity improvements in the ER and WM areas, the waste streams associated with the proposed Accelerator for the Production of Tritium (APT). Subsequent to the meeting Mr. Crane noted that it might be useful to review the ER Strategic Plan first and to review the Plug-In ROD approach and the ER Early Action Strategy together.

Mr. Lawless thanked everyone for coming and closed the meeting.

NOTE: The meeting handouts may be obtained by calling 1-800-249-8155.