SRS Citizen's Advisory Board

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Waste Management Committee

Meeting Summary

November 13, 2000
North Augusta Community Center
North Augusta, SC

The Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Monday, November 13 at 7:00 p.m. at the North Augusta Community Center, North Augusta, SC. The purpose of the meeting was to review draft motions on the Consolidated Incineration Facility (CIF) Resource Conservation and Recovery Act (RCRA) Permit Part B Permit Modifications and the Release of Radioactive Scrap Metals; hear a presentation on the Evaporator Recovery Program and Tank Space Management and a Salt Processing Focus Group Update; and public comment. Attendance was as follows:

CAB Members	Stakeholders	DOE/Contractors
Wade Waters*	Mike French	George Mishra, DOE
Bill Willoughby*	Rick McLeod, CAB Tech Advisor	Gail Whitney, DOE
Karen Patterson*	Sam Booher	John Reynolds, DOE
Perry Holcomb*	Lynn Waishwell, CRESP	Howard Gnann, DOE
William Lawrence*	Todd Davis, DNFSB	Tom Treger, DOE
Murray Riley	Bill Lawless	Robert Hinds, WSRC
		Ken Crase, WSRC
	Regulators	Tom Lex, WSRC
	Keith Collinsworth, SCDHEC	Kelly Dean, WSRC
	David James, EPA	Sonny Goldston, WSRC
		Ken Rueter, WSRC
		Mary Flora, WSRC
		Linda Perry, WSRC
		Helen Villasor, WSRC

*** WMC Members present**
Note: Lola Richardson, Beckie Dawson, Georgia Leverett, and Charleen Townsend, WMC members, were unable to attend.

Wade Waters, WMC Chair, welcomed those in attendance and asked if there were any public comments. Mr. Booher said he would like to know who is going be responsible for the financial outcome when the Tri-Party Landfill begins leaching into Upper Three Runs. Mr. Booher asked that his question be placed in the record since he believes it is not the responsibility of taxpayers for any problems that occur from the landfill. Mr. Waters then asked the attendees to introduce themselves.

Review of Consolidated Incineration Facility (CIF) Resource Conservation and Recovery Act (RCRA) Permit Part B Permit Modifications Draft Motion:

Wade Waters, motion manger read the draft motion and explained that on July 20, 2000, South Carolina Department of Health and Environmental Control (SCDHEC) provided conditional approval of the CIF Suspension Plan submitted by SRS on June 13, 2000. On September 27, 2000, SCDHEC issued a 45-day comment period on the SRS RCRA Part B Permit modifications to reflect the conditions of the CIF's suspension of operations. At the request of the CAB, the public comment period was extended through November 17, 2000 so the CAB would have an opportunity to provide comments to SCDHEC through a recommendation, which would be voted on at the Board's November 14, 2000 meeting. As the permit modification states, the suspension of operations shall continue until CIF is either restarted or is closed. SCDHEC also included in the permit modification a schedule of activities, which SRS must follow to remain in RCRA compliance. In the schedule, SRS must decide to re-start (operate) CIF or pursue an alternative treatment (for the PUREX) by April 1, 2002. If SRS decides to pursue an alternative treatment, then CIF must begin final closure on the same date (April 1, 2002). In the draft motion the CAB recommended that SCDHEC consider another schedule for the permitting and closure activities associated with CIF. The CAB was also recommending that if SCDHEC was not willing to modify its closure timeframe, then DOE should take CIF out of suspension and immediately re-start CIF under the current operating permit. The CAB noted that during the operation phase, DOE should continue to investigate improved efficiencies in the current operations of CIF and pursue viable, cost effective, alternative treatment technologies that can be implemented and will meet all regulatory requirements.

After some discussion, it was noted that the group was still concerned that when CIF is closed down and turned into a Greenfield, and the new technology does not work, what will happen to the Site Treatment Plan commitment to dispose of the PUREX. In this scenario, the regulators said that they would have to assume there is no alternative technology available; however, if one does emerge, then SCDHEC said it could be more flexible. The group still expressed a concern that if SCDHEC can not be flexible, then the only solution is to keep CIF up and running. While the CAB wants to work with the site as it pursues the development of an alternative technology, it also wants to ensure that a safety net is in place for protection. Therefore, it was suggested that the motion be rewritten to include a statement that SCDHEC recognize the need for adequate time for the full development, implementation and operation of an alternative treatment technology before CIF closes and that the regulators provide the CAB with their assessment of extending the closure period, and if so, the maximum allowable time the closure period could be extended.

The CAB Technical Advisor was asked to rewrite the draft motion to include the concerns of the CAB before it was presented to the Board at its November 14, 2000 meeting.

Evaporator Recovery Program and Tank Space Management:

Tom Lex provided a presentation on the Evaporator Recovery Program and the use of Type I Tanks. Mr. Lex said that SRS must store additional waste in Type I tanks (Tanks 5, 6 and 8) in order to avoid the shutdown of waste immobilization activities by January 21, 2001. Wade Waters asked Mr. Lex to explain the difference in the types of tanks and why the evaporator was so important. Mr. Lex said that he would discuss the types of tanks later in the presentation; however, Mr. Lex explained that currently, the evaporator has high levels of silicon in the feed material which has caused deposits to form in the evaporator. While Tanks 2 through 8 are structurally sound and safe, Mr. Lex added that the 2H Evaporator is needed for operations at the Defense Waste Processing Facility (DWPF). The 2H Evaporator has been shut down since January 2000 and will not start back up until spring of 2001. The High Level Waste (HLW) program has recognized that space for DWPF recycle will run out on January 21, 2001, and all Type III tank space is required for current and future high activity waste storage. Mr. Lex said that HLW has briefed SCDHEC and the Defense Nuclear Facilities Safety Board (DNFSB) on the situation and the regulators have agreed to the use of Type I tanks.

Mr. Lex explained that the benefits of using Type I tanks include continued operation of DWPF beyond January 21, 2001; the storage of low risk waste allows continued immobilization of higher risk sludge; and continued preparation of the next sludge fed batch for DWPF. Mr. Lex then compared the differences among Type I, Type III, and Type IV tanks by using overhead slides depicting individual characteristics for each tank type. Mr. Lex also showed an overhead slide of all the tanks and the waste tank levels by tank types. Bill Lawless asked for a copy of the Waste Tank Levels slide.*

Mr. Lex concluded his presentation by noting that Type I tanks 5, 6, and 8 will be used for safe storage of waste; HLW will begin transfer of the first DWPF recycle to Tank 6 by December 18, 2000; HLW will begin transfer of the first material from DWPF sludge batch preparation to Tank 8 in January 2001; and HLW will begin transfer of DWPF recycle to Tank 5 in February 2001.

<u>Review of Release of Surplus and Scrap Materials Draft Motion:</u>
Bill Willoughby, motion manager reviewed the release of Surplus and Scrap Materials draft motion by referencing the January 2000 Moratorium on the release of volumetrically contaminated metals. Mr. Willoughby said that a task force had been established by the Secretary of Energy to review DOE policies regarding the release of all materials for reuse and recycle. In July 2000, a Memorandum was issued by DOE that suspended the unrestricted release for recycling of metal from radiological areas within DOE facilities and directed improvements in the release criteria.

Mr. Willoughby said that DOE had revised its direction and associated guidance documents (DOE Order 5400.5, Chapters V and VI) applicable to metal releases and a public comment period on the proposed changes that ends December 4, 2000. DOE is also conducting a feasibility study on the potential use of a dedicated steel mill to recycle metals within the DOE complex.

Mr. Willoughby said that since the moratorium on DOE's release of volumetrically contaminated metals is dependent upon the Nuclear Regulatory Commission's (NRC) establishment of national standards, the CAB is concerned about the time delay in receiving this standard. In addition, the CAB believes that if DOE is truly committed to public participation, then DOE should extend the opportunity for the public to review and comment on any forthcoming DOE-HQ guidelines and guidance for field offices to implement the directive.

Therefore, the CAB recommended that DOE-SR develop and certify a program of the control and release of personal property including metal for recycling that meets the new order and that DOE-SR involve the CAB in the development of its public participation program for the release of radioactive property and scrap metal. However, the CAB strongly disapproves of DOE's intent to establish a dedicated steel mill to recycle metals within the DOE complex and believes DOE's time and resources should be better spent on working with the NRC on the national standards for volumetrically contaminated metals.

A question arose as to the clarity of the definition of radioactive and non-radioactive materials, and there was some further discussion on sealed radioactive sources. Mr. Willoughby used a radiographic sealed source as an example to explain that when such a source is no longer strong enough to make good radiographs it becomes a scrap sealed source. It was then suggested that some editorial changes be made to the draft motion before presenting it to the full Board on November 14, 2000.

<u>Salt Process Focus Group Update:</u>
Mike French, co-chairman of the Salt Process Focus Group, opened his presentation by providing background information on the previous six briefings provided to the WMC by the Focus Group this year. Mr. French then said that the purpose of the current briefing was to provide a status of the technology selected to process salt solution.

Mr. French referred to a presentation made to the Focus Group by Ken Rueter on September 12, 2000 and reiterated Mr. Rueter's comments for the WMC that the research and development (R&D) program and resulting technology selection was being directed by EM-50 with support from the Westinghouse Savannah River Company, universities, private companies and National Laboratories. Mr. French said that the three salt decontamination technologies being developed are CST Non-elutable Ion Exchange, Small Tank TPB Precipitation, and Caustic Side Solvent Extraction. Technology is also being developed for alpha removal that will be applicable to all of three technologies. Mr. French said that Direct Disposal is not being researched at this time and that the schedule for resolution of high risk focused R&D is April 2001.

Mr. French noted that the two phases of TD to eliminate high risk elements are:

Approach

- **Basic chemical and physical properties**
- **Define process concepts and confirm approach uses proven technology**

Process

- **Define research plans and experiments**
- **Bench scale demonstration**
- **Scale-up testing with simulated waste**
- **Real waste testing**

Mr. French provided a matrix on Alpha Removal TD and noted that CST IX and Caustic Side Solvent Extraction are more critical. Mr. French also provided matrices on CST Ion Exchange TD that showed the comparison of high risks in February 2000 and the September 2000, Small Tank TPB Precipitation TD that depicted high risk in April 2000 and September 2000, and Caustic Side Solvent Extraction TD that showed the high risks in March 2000 and September 2000. The matrices also included the activity levels for all three technologies.

In closing, Mr. French shared the Focus Group's conclusions on the technology selection that is underway. For example, Mr. French noted that the R&D program is aimed at providing sufficient information to allow design with no risks considered to be high, i.e., no show stoppers relative to process viability. The program is complex and involves a large number of different organizations; however, it appears to be progressing satisfactorily. The Focus Group's last conclusion is that the R&D seems to be progressing according to schedule, i.e., all high risk elements could be eliminated by June 2001, the date for the alternative selection. However, Mr. French said that a Focus Group concern is that the program is complex and has possibilities for schedule delays that may affect the technology decision date. Mr. French suggested that DOE continue to work aggressively to ensure that delays do not occur.

<u>Public Comment:</u>
Mr. Waters asked if there was any other public comment. With there being none, Mr. Waters adjourned the meeting.

Copies of the Waste Tank Levels by Tank Type Chart may be obtained by calling 1-800-249-8155.

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