



SRS Citizens Advisory Board

Waste Management Committee

Meeting Summary

October 15, 2001
North Augusta Community Center
North Augusta, SC

The Waste Management Committee (WMC) of the Savannah River Site (SRS) Citizens Advisory Board (CAB) met at the North Augusta Community Center on October 15, 2001. Attendance was as follows:

CAB Members

Wade Waters*
Bill Willoughby*
Gerald Devitt*
Meryl Alalof*
Vera Jordan*
Perry Holcomb*

Stakeholders

Paula Austin
Lee Poe
John Austin
Sam Booher
Bill Lawless
Rick McLeod, CAB Tech
Advisor

Regulators

None

DOE/Contractors

Charlie Anderson, DOE
Larry Ling, DOE
Gerry Flemming, DOE
Gail Whitney, DOE
Julie Petersen, DOE
Elmer Wilhite, WSRC
Bill Morrison, WSRC
Teresa Haas, WSRC
Ken Crase, WSRC
Sonny Goldston, WSRC
Helen Villasor, WSRC

Via Teleconference

Ken Picha, DOE-HQ

*Denotes members of the WM
Committee

Wade Waters opened the meeting promptly at 6:00 p.m. by thanking everyone for coming. Mr. Waters noted that there would be a change in the agenda since Ken Picha, DOE-HQ, who was participating in the meeting via teleconference, had a delayed flight and would call in upon his arrival in Minneapolis, MN.

Public Comment

There were no public comments.

High Level Waste Progress Report

Charlie Anderson opened his remarks by noting that in Fiscal Year 2001, 227 canisters had been poured at the Defense Waste Processing Facility (DWPF). Mr. Anderson said the goal had been 220; therefore, the increased production was an indication that the program had performed well

over the year. When asked where the organics were sent, Mr. Anderson responded that the low-activity filtrate went to Tank 50 and then to Saltstone for final disposal.

Mr. Anderson reported that after chemical cleaning, the 2H Evaporator became operational on October 5, 2001. Because of criticality concerns, questions were raised about the amount of residue that had been removed during the cleaning process. Noting that he would be providing another briefing to the WMC on October 22, 2001, Mr. Anderson said he would obtain the accurate information and may be able to provide it then.

Mr. Anderson continued with his report by saying that meetings were being held with the South Carolina Department of Health and Environmental Control (SCDHEC) to discuss the closure of Tanks 18 and 19. Closure of these two tanks would complete the 4-Pack, an action which the Citizens Advisory Board has supported since the closure of Tanks 17 and 20. A request was made for Mr. Anderson to come back to a WMC meeting to provide a report on the High Level Waste's (HLW) closure plan for the 4-Pack.

Mr. Anderson announced that a Tank Closure Workshop is to be held in Charleston, SC on November 14-15, 2001 and said that the CAB Chair and WMC Chair are invited to attend. Wade Waters said that he would be out of town during that date; however, he would ask Bill Willoughby, Vice Chair of the WMC to attend in his place.

Mr. Anderson continued his discussion by noting that the Salt Disposition Record of Decision (ROD) had been signed by EM-1 and was scheduled to be issued in the next few days. Mr. Anderson said while he believed that any of the evaluated alternatives could be implemented, DOE would most likely select Caustic Side Solvent Extraction for separation of radioactive cesium from SRS salt wastes.

Bill Willoughby asked if the waste from the proposed Mixed Oxide (MOX) Fuel facility would be classified as high level waste and if so, what would be its disposition path. Mr. Anderson responded that the classification question would determine where it would go, i.e., if it were to be classified as transuranic (TRU), it would be solidified, blended with other high level waste campaigns and then be sent to WIPP for disposal. Mr. Anderson said that many technical issues would need to be addressed before MOX would come on line in 2010.

Concerned about development and indications of an industrial zone for reuse for future projects, Sam Booher said that he would like to hear a discussion and see slides on what the Tank Farm will look like after closure. Mr. Anderson said that while no date has been set for closure of the Tank Farm, there could be the possibility of a clay cap covering the Tank Farm under the Comprehensive Environmental Recovery, Compensation and Liability Act (CERCLA) as it moves to closure. Mr. Anderson asked Larry Ling to send a copy of the Land Use Plan to Mr. Booher.

Mr. Anderson closed his discussion by noting that comments were received from both the public and contractors on the Salt Processing Projects Request for Proposal (RFP). Mr. Anderson noted that the RFP is still scheduled to be issued in late November. When asked if the HLW plan for two contractors was still there, Mr. Anderson indicated that the plan had not changed. However, at this time, Mr. Anderson said it was premature to provide any additional information on the RFP; however, he said that he would like to come back and talk to the CAB at its Combined Meeting on November 13, 2001, and provide more details on HLW and some of its activities.

SRS Behavior Based Safety Process

Bill Morrison opened his presentation by saying that statistics indicate that 96 percent of all workplace accidents are behavior-related. Mr. Morrison said that the Solid Waste Division (SWD), along with the rest of the Westinghouse Savannah River Company (WSRC), agreed to implement a

Behavior Based Safety (BBS) process in order to foster a safety culture that is being recognized as consistent with industry across the nation.

One of the reasons that BBS has been so effective in industry is because it fully engages the workforce in safety management. Typically, traditional safety programs are top-down driven, with attention provided only when injuries occur. The BBS process encourages "safe behaviors" through routine-facilitated safety discussions in the work environment. Mr. Morrison said that these are typically peer-to-peer discussions that encourage, through positive reinforcement, safe behaviors. The process also involves the creation of a local safety improvement team. The team is comprised of a cross section of the SRS employee population and is typically chaired by a worker level member. This team reviews data collected from field safety discussions and determines the action necessary to resolve safety issues.

Using examples of several different behavioral approaches, Mr. Morrison said that it was his goal to inform the WMC of the BBS safety culture that is being used at SRS in order to provide stronger attention to worker safety and protection, especially at a time when an individual's focus may shift because of world uncertainty. When asked if SRS was within goal using BBS, Mr. Morrison said the site is not yet where it wants to be; however, whenever a new program is implemented, generally it takes three to five years before safety rates will change and can be measured successfully.

Effects of Eliminating Compaction of Job Control Waste

Noting that his presentation contained information on both super and dynamic compaction, Elmer Wilhite said that the title of his presentation was inaccurate and should read "Super Compaction" instead. Mr. Wilhite then opened his presentation by providing the following background on Waste Super Compaction:

- **Low-level radioactive waste has been super compacted in the SRS Super Compaction Facility since June 1999**
- **Super Compacting was used to reduce vault utilization**
- **Waste is first sorted in the Waste Sort Facility and is then loaded into 55-gallon drums for super compacting**
- **Super Compacted drums ("pucks") are loaded into B-25 boxes (four feet wide by six feet long by four feet deep, metal) for disposal**
- **B-25 boxes containing super compacted waste that meets the trench Waste Acceptance Criteria are disposed in trenches**

Mr. Wilhite said that CAB Recommendation #119 ("Compacted Versus Non-Compacted Waste Disposal in the E-Area Trenches") was adopted March 28, 2000 to evaluate whether waste compaction prior to trench disposal was needed to identify the need for compaction; identify technical concerns including subsidence potential and impact to Performance Assessment (PA)/Composite Analysis (CA); and compare trench performance with and without compaction with different strategies to reduce subsidence and impacts on a closure cap.

Mr. Wilhite continued by explaining that the cost study that had been performed to determine treatment versus long-term cap maintenance; to estimate subsidence potential with and without compaction and estimate subsidence potential reduction by pre-capping treatment, i.e., standard dynamic compaction; and to develop a recommendation as to cost-effectiveness of waste compaction.

Mr. Wilhite said the study concluded that:

- **Use of B25 boxes results in large inherent subsidence potential**

- Costs dominated by cost of B-25 boxes, super compactor operation, and subsidence repair
- Use of the super compactor combined with dynamic compaction provides two benefits over dynamic compaction alone:
 - Reduces subsidence potential by only an additional seven inches
 - Decreases required Engineered Trench area by 42 percent

Mr. Wilhite concluded his presentation by emphasizing that the study has been completed and is being documented. It had been reviewed with the CAB at the August 28, 2001 combined committee meeting; reviewed with senior SRS management; and Mr. Greg Rudy, DOE-SR Manager has requested a recommendation from his staff in November. Wade Waters said that the WMC is interested in the study and its results and noted that it would be beneficial at this time to provide stakeholder comments to DOE as well. Mr. Waters then asked Rick McLeod, the CAB's technical advisor to develop a draft motion for presentation to the CAB at its full Board meeting on October 23, 2001.

Scrap Metals Programmatic Environmental Impact Statement (PEIS)

Sonny Goldston provided opening comments on the scrap metals PEIS and discussed briefly the public scoping period that is currently underway. At this point in the evening, Mr. Ken Picha, DOE-HQ joined the meeting via teleconference. Mr. Picha explained that he was in Minneapolis, MN where another scoping meeting regarding the PEIS was to be conducted the next day. Sonny Goldston provided the background on the PEIS and explained that DOE initiated the document to evaluate options for the disposition of DOE scrap metals that may have residual surface radioactivity.

Mr. Picha provided a brief overview of the proposed alternatives that the PEIS will evaluate. They are as follows:

- No Action – continue current suspension indefinitely.
- Alternative 1 – Control the release of scrap metal from DOE radiological areas consistent with requirements in DOE Order 5400.5.
- Alternative 2 – Control the release of scrap metal from DOE radiological areas consistent with alternative standards to DOE Order 5400.5.
- Alternative 3 – No unrestricted release of scrap metal from DOE radiological areas unless there is clear knowledge, confirmed by monitoring, that there is no potential for residual surface radioactivity.

Mr. Picha said that the scrap metals disposition paths under discussion at the public scoping meeting include unrestricted release, continued radiological control, restricted release and disposal. Mr. Picha noted that the scoping meetings are being held to gather general public scoping comments on the PEIS. However, when asked about costs, Mr. Picha said that costs are going to be an important part of the PEIS because DOE will need to consider all cost associated with disposal. Mr. Picha said that DOE's intention is to capture all reasonable costs associated with the each of the alternatives that it can.

During review of the draft motion on the PEIS the WMC is intending to submit to the CAB at its October 23, 2001 meeting, general discussion followed and questions were raised regarding reuse. Mr. Picha clarified that right now DOE is proposing to address scrap metals that cannot be reused. However, Mr. Picha noted that at some of the scoping meetings being conducted nationally, DOE-HQ received several comments concerning reuse and that it should be considered in the PEIS. Additional questions were raised pertaining to the radiological and non-radiological standards that should be addressed, including those established by the Nuclear

Regulatory Commission (NRC). Mr. Picha said that while the NRC does have a set of standards, it is not DOE's intent to set different policy.

Sonny Goldston concluded his presentation as Wade Waters thanked Mr. Picha for his help in trying to clarify some of the question that the public seems to have experienced regarding the PEIS. Following the discussions of Messrs. Picha and Goldston, suggestions were made to revise the draft motion based on the information the WMC had just received.

Offsite Waste Shipments Update

In the interest of time, Sonny Goldston provided a brief overview of the Success Story, the first five shipments that left SRS in 2001, including Transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) for disposal, Low-Level Radioactive (LLW) wastes to Nevada Test Site for disposal, Mixed Low-Level (MLLW) wastes to Envirocare for disposal, PCB shipment to Oak Ridge for treatment and disposal, and MLLW shipment to Materials and Energy Corporation for treatment and then to Envirocare for disposal. Mr. Goldston also noted that the accelerated shipment of TRU waste to WIPP allowed for the first shipment of Mound TRU waste to be transferred to SRS. This accomplishment allows Mound to close early, accelerates SRS shipments of TRU waste to WIPP, only one facility to be built at SRS and significant savings in taxpayer dollars.

Mr. Goldston said that it was important to know that DOE had stopped all shipments due to the terrorist attacks on New York City and Washington, DC. Then the shipment moratorium was lifted on September 24, 2001 and shipments resumed as soon as possible. However, with the U.S. Coalition attacks on Afghanistan on September 29, the moratorium on DOE shipments has been restored.

Public Comment

Bill Lawless asked each attendee to think about the circumstances surrounding the tragedies of September 11, 2001 and look at the present and future with fresh eyes. Dr. Lawless asked the question of how it was possible to cause social disruption through the eyes of a terrorist. Dr. Lawless added that all too often decisions are made for political reasons rather than scientific.

Given the liberal amount of information that resides on the Internet, a question was raised concerning the amount of DOE information that has been removed from its website.

Wade Waters adjourned the meeting at 9:30 p.m.

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