



SRS Citizens Advisory Board

Waste Management Committee Meeting

Aiken Municipal Conference Center, Aiken, SC

March 7, 2006

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, March 7, 2006, 5:00 PM, at the Aiken Municipal Conference Center, Aiken, SC. The purpose of this meeting was to discuss the Interim Processing Plan status, Glass Waste Storage Building #2, recommendation status and to hear public comment. Attendance was as follows:

CAB Members

- Bob Meisenheimer
- Joe Ortaldo
- Karen Patterson
- Manuel Bettencourt
- Mary Drye
- Leon Chavous
- Wendell Lyon
- Alex Williams
- Madeleine Marshall

Stakeholders

- Bill McDonell
- Jack Roberts
- Bill Willoughby
- Russ Messick

- John Contardi, DNFSB
- *Rick McLeod

Regulators

- Dawn Taylor, EPA
- Ted Millings, SCDHEC

DOE/Contractors

- Terry Spears, DOE
- Bill Clark, DOE
- Doug Hintze, DOE
- Greg Johnson, DOE
- Julie Petersen, DOE
- Ginger Dickert, WSRC
- Steve Thomas, WSRC
- Bob Hinds, WSRC
- Ron Campbell, WSRC
- Teresa Haas, WSRC
- Jack Kasper, Parsons
- Mark Phifer, WSRC
- Bob Hiergesell, WSRC
- Jim Moore, WSRC

- *WM committee members* * *CAB technical advisor*

Welcome and Introduction:

Bob Meisenheimer, Chair, thanked everyone for being at the meeting and asked them to introduce themselves. Mr. Meisenheimer mentioned that the letter from the WMC to Assistant Secretary Rispoli has finally been mailed. It was signed by Mr. Meisenheimer on Thursday, March 2, 2006. The letter was on the concern of the WMC for the process used in making the decision on confinement for the Salt Waste Processing Facility (SWPF).

The question and answer matrix on Salt Waste Processing was released by DOE. Anyone wanting a copy should contact Jim Moore. DOE responded to 58 questions.

Mr. Meisenheimer mentioned that there were two new draft recommendations that the WMC would like to review. The WMC can look over the draft recommendations and then they will be distributed via e-mail. Comments will be received by e-mail. The draft recommendations will then be reviewed at the Combined Committee meeting on March 27. The draft recommendations are on the SRS Transuranic (TRU) Waste Update and on the High-Level Waste (HLW) Systems Approach.

Manuel Bettencourt, Motion Manager for the TRU recommendation requested that comments should be sent in as soon as possible so that the modified recommendation could go out in the CAB package before the March CAB meeting.

Mr. Meisenheimer, Motion Manager for the HLW Systems Approach recommendation said that the letter that was just sent to Assistant Secretary Rispoli said exactly what the WMC would like to say in the recommendation. He would like to include in the recommendation the contingencies and activities in the Interim Process Plan and also the need to fund all these activities. He requested also that comments be sent in as soon as possible.

Interim Processing Plan Status:

Doug Hintze, DOE, explained that SR is in the process of developing the Interim Processing Plan for liquid waste disposition which includes the tank closures. The period of the Interim Processing Plan is between now and when the SWPF comes on line in 2011. Previously the site had developed a HLW system plan which was at a high level. This Interim Processing Plan will be more detailed and of shorter duration. This presentation would entail a background, status of Waste Determination, the Interim Processing Plan status and progress of key facilities.

In 2003 and 2004 site worked closely with the State of South Carolina to develop its two-phase strategy for disposition of salt waste at SRS. The interim salt processing would cover the period prior to the availability of SWPF, the high capacity salt processing facility originally scheduled to start in 2009.

The interim strategy objectives are safe waste system operation, sustained Defense Waste Processing Facility (DWPF) sludge treatment, meeting Federal Facilities Agreement (FFA) milestones for waste tank closures, sustained operation of H-Canyon for approved materials stabilization missions and preparation for high capacity SWPF operations.

Key implementation elements of the interim strategy include SWPF start-up as soon as possible, Deliquification, Dissolution, and Adjustment (DDA) disposition, Actinide Removal Process (ARP) and Modular Cesium Removal Unit (MCU) treatment and Saltstone Production Facility (SPF) construction.

DOE documented its salt processing strategy in a draft Section 3116 Waste Determination for Salt Waste Disposal at the Savannah River Site that was submitted to the U.S. Nuclear Regulatory Commission (NRC) for consultation in February 2005. The NRC issued a Technical Evaluation Report (TER) documenting its review of DOE's Section 3116 Waste Determination on December 28, 2005.

The NRC TER validated there is reasonable assurance salt waste treated per DOE's strategy does not require disposal in a geologic repository, has had highly radioactive radionuclides removed to the maximum extent practical, does not exceed concentration limits for Class C low-level waste and will be disposed of in compliance with performance objectives of 10 CFR 61, Sub-Part C. The Secretary of Energy approved the Final Section 3116 Waste Determination for Salt Waste Disposal on January 17, 2006.

SRS is now working with the State of South Carolina to finalize the interim processing plan for implementation of the Waste Determination and to support environmental permitting actions.

Initiation of interim salt processing has been delayed. The current forecast start is July 2006 (vice October 2005). This was driven by longer Waste Determination process duration and technical issues.

The start-up of the SWPF has also been delayed. In November 2005, DOE directed Parsons (SWPF contractor) to enhance the design of the SWPF to more stringent natural phenomena hazard requirements. This decision resulted in a projected delay of SWPF start-up to September 2011. Due to the longer than expected Waste Determination process, additional tank heel removal activities must begin in the interim period. Collectively, these impacts result in the need for additional actions to meet the objectives of the interim strategy.

SRS is evaluating options for inclusion in the interim processing plan. An Executive Steering Group has been formed consisting of senior representatives of South Carolina Department of Health and Environmental Control (SCDHEC), the SC Governor's Nuclear Advisory Council, DOE Headquarters Office of Environmental Management, DOE Savannah River Operations Office, the Washington Savannah River Company, Parsons and the Defense Nuclear Facilities Safety Board as an ex officio member. The purpose of the Executive Steering Group is to assure awareness by key leaders of proposed activities in the interim plan and to facilitate communications, decision making and issue resolution. Three meetings have been held since December 2005 and significant progress has been made. A fourth meeting is planned for mid-March. The goal is to meet all interim strategy objectives identified earlier and maintain consistency with the Waste Determination. Key elements of the interim processing strategy are not anticipated to change. They are that SWPF start-up as soon as possible, ARP and MCU treatment will be the low capacity salt treatment process prior to SWPF becoming operational and there will be limited use of DDA disposition.

The Executive Steering Group has identified a technically viable approach for resolving impacts. Cost estimates are being finalized and budget issues are being addressed. The revised implementation plan must be properly documented and the agreement documenting DOE and the State commitment is being developed. The Executive Steering Group is working to finalize these actions by April 2006.

Key facilities and their status include:

- SWPF

The enhanced preliminary design is well underway and is scheduled for completion by September 2006. Approval of project cost and schedule baseline is scheduled for the Fall of 2006. The project team will continue to explore avenues to expedite the project schedule.

- ARP/MCU

The ARP construction is on schedule for completion by March 2006. The MCU design is complete and construction is on schedule for completion by December 2006. MCU component and contactor module testing is underway. MCU/ARP start-up is currently targeted for September 2007 and is anticipated to operate until 2011.

- Saltstone

Process modifications supporting interim processing were completed in December 2005. Start-up testing uncovered a number of issues that have delayed return to operations. The Operational Readiness Assessment is forecast for mid-March 2006 and readiness for operations anticipated by mid-April 2006.

- DDA

Preparations for DDA processing are complete. The initial batch of dissolved salt waste from Tank 41 is currently staged in Tank 49.

In conclusion, the Final Section 3116 Waste Determination for Salt Waste Disposal at the SRS was approved on January 17, 2006. SRS is working with the State of South Carolina via an Executive Steering Group to finalize its interim processing plan. The SRS appreciates the assistance of the State in resolving the interim processing issues. Solid progress is being made in developing the key facilities and treatment processes necessary to implement the interim strategy.

The following comments were made during discussion:

- SCDHEC has requested that the site limit the amount of material going to DDA as much as possible.
- The State is interested in limiting the amount of curies in Saltstone to less than is in the Waste Determination.
- The Site is asking for the funding to complete all the requirements implemented in the interim processing plan.
- The Site is working with the State to obtain the permits necessary to start Salt Processing operations.
- The Site is planning on moving low level waste from tank 50 so it can be used for HLW by constructing new tanks to hold the low activity waste.

- There has been a good deal of independent peer review of many of the technical applications planned on being used.
- It was requested that the WMC continue to be informed and kept up to date on the activities on salt processing.
- The rate of glass in canisters at DWPF is dependent on the quality of input going into DWPF. High aluminum content waste will reduce the throughput of DWPF.

Glass Waste Storage Building #2:

Doug Hinze reported DWPF is projected to continue to produce canisters at an average rate of 230 canisters per year. In order to make the 230 average, the DWPF has been scheduled to produce 250 canisters per year through 2008 because of the low through-put in 2003 at 130 canisters. A Canister Shipping Facility (CSF) for transferring HLW canisters into radioactive waste shipping casks will be available to begin shipments in 2012 per the current planning guidance. Final shipment of DWPF canisters will occur by 2020. This equates to a shipping rate of 563 canisters per year.

Glass Waste Storage Building (GWSB) #2 has been designed based on GWSB #1 and upgraded to existing codes and standards. Non-essential space was eliminated and it has been downgraded from Safety Class (PC-3) to Safety Significance (PC-2). The final design was completed on January 26, 2004. The construction contract was awarded to The Krog Corporation on March 29, 2004. Facility construction and turnover to DOE was completed on December 1, 2005. The facility will be turned over to WSRC on March 13, 2005. Operations are scheduled to start on May 11, 2006 after Operational Readiness Reviews by WSRC and DOE. Photographs of the construction progress were shown during the presentation. It was mentioned during discussion that the GWSB designed life is 50 years.

Recommendation Status:

Bob Meisenheimer reviewed some of the outstanding recommendations to update their status. The following status changes were made:

Move from Pending to Open: Recommendation #244, #220, #204, #205 and #183.

Move from Open to Close: Recommendation #212, #183

Recommendation #212 has some open items that will be moved to the new draft HLW Systems recommendation currently being drafted.

Recommendation #200 may be closed provided that other sites still have the ability to do treatability studies at the Savannah River National Laboratory.

Public Comment:

Dr. Don Orth stated that there was a letter written on May 30, 1991, *Building 371, Rocky Flats: A Case Study*, SRL-STF-91-0070, that summarizes the findings of the Management Oversight Group chartered by DOE Albuquerque reviewing the reconstruction project for Building 371 at Rocky Flats. This review found major problems with the design and technology bases, the project management system, and support by the contractor and DOE management. Dr. Orth said that the letter gave the reason why the plutonium recovery facility failed. He said it might be beneficial for the CAB and the site to review the letter to review the problems encountered by this project. Joe Ortaldo requested that this letter be forwarded to the Waste Management Committee.

Adjourn:

Mr. Meisenheimer adjourned the meeting.

Follow-Up Actions:

The following are the actions items:

- Send out TRU Waste draft recommendation for comments. - Jim Moore
- Update the HLW Systems Approach draft recommendation so it can be distributed for comment. - Bob Meisenheimer/Jim Moore
- Request Parsons to present the design/technology history - Ex: When did the site consider not running ARP at the same time as SWPF - Question by Rick McLeod - to the WMC. - Terry Spears/Jim Moore
- Change the status of the following recommendations:

#224 - Move to Open

#220 - Move to Open

#212 - Move to Close - Move open items to the new HLW Systems Approach draft recommendation

#204 - Move to Open

#205 - Move to Open

#200 - I will check to make sure other sites can do treatability studies at SRNL. If that is the case, we will close this recommendation. - Jim Moore

#183 - Move to Close