

**SRS Citizens Advisory Board  
Waste Management Committee Meeting  
Aiken Municipal Conference Center, Aiken, SC  
December 12, 2006**

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, December 12, 2006, 5:00 PM, at the Aiken Municipal Conference Center, Aiken, SC. The purpose of this meeting was to discuss the status of Tank 48 and the Salt Processing Programmatic Update and to hear public comments. Attendance was as follows:

**CAB Members**

- Bob Meisenheimer  
- Joe Ortaldo  
- Manuel Bettencourt  
- Bill Lawless  
- Kuppuswamy Jayaraman  
- Karen Patterson  
Madeleine Marshall  
Leon Chavous  
Wendell Lyon  
Jimmy Mackey  
Judy Greene-McLeod

**Stakeholders**

Stan Howard  
Lee Poe  
Jack Roberts  
Charles Pair  
Chris Timmers  
Perry Holcomb  
Murray Riley  
Bill Guthier  
John Smith

**DOE/Contractors**

Terry Spears, DOE  
Larry Ling, DOE  
Sheron Smith, DOE  
Julie Peterson, DOE  
Dave Amerine, Parsons  
Steve Thomas, WSRC  
Jim Moore, WSRC  
Bob Hinds, WSRC  
Roy Campbell, WSRC  
Mindy Mets, V3  
Robert Campbell, WSRC  
\*Rick McLeod, V3

- Waste Management Committee    \* CAB technical advisor  
Members

**Welcome and Introduction:**

Bob Meisenheimer, Chair, thanked everyone for being at the meeting and asked them to introduce themselves. Mr. Meisenheimer referenced the meeting ground rules and reviewed the agenda.

Joe Ortaldo read a statement from Shelly Sherritt, South Carolina Department of Health and Environmental Control (SCDHEC), on the status of the Saltstone Disposal Facility permit modification approval.

*“SCDHEC has received comments on the Saltstone Disposal Facility permit modification from 29 sources (either individuals or groups). SCDHEC is evaluating all the comments received in order to make a final permit decision. The final permit decision is anticipated in December of 2006 or January of 2007. When the final permit decision is issued, DHEC will concurrently issue responses to the comments received during the public comment period. An email notice of the final permit decision will be sent to Sheron Smith for distribution to the CAB.”*

**Status of Tank 48**

Larry Ling, Director, Salt Processing Division, Department of Energy (DOE) – Savannah River Operations Office (SR), provided an update on available space and status of Tank 48. He began by providing an overview stating the need date is by January 2010 to support planned tank space requirements per Disposition Processing Plan (DDP), and will provide support to future waste processing facilities Disposition of Tank 48 material which reduces risk in the tank farm and support running of the MCU & ARP facilities.

Larry continued by stating the current status is:

- completed alternative initial testing on 10/31/06
- Independent Technical Review (ITR) Response Plan on 11/21/06
- DOE Down-Select Review on 1/07

- Critical Decision 0 for Tank 48 Recovery Project Approval by 2/07
- Defense Nuclear Facilities Safety Board actively engaged in process and participated during the ITR and visited the Hazen Test Facility

Larry stated that the Independent Technical Review (ITR) Team Final Report was provided to Parsons for their response on 11/22/06 and that DOE-SR received Parsons' response on 12/03/06. DOE-SR Integrated Project Team and Headquarters (HQ) staff will evaluate the Parsons response. The ITR concluded that findings and recommendations can be addressed during the final design.

DOE-SR is forming its own team to evaluate and when down select is complete, currently preparing for the Critical Decision (CD) 2 which is planned for February 2007.

Rick McLeod asked based on alternative selected, how long to recover Tank 48? Larry replied by early 2008 or 2009. DOE-SR is reviewing all possibilities and looking at efficiencies. Rick asked what the risks are. Larry stated the material in the tank. Bill Lawless expressed a concern of the dissolution approach to solving curries processing from Tank 41 and asked how is DOE treating Saltstone processing facility, diluting to make the permit? Steve Thomas, WSRC, replied that there is not a dilution factor going on, adjusting for processing ability, not just adding fluid in the process, only dry chemicals and that as we process, Tank 41 contents are not diluted on purpose. Uncertainty of material coming into part is factored in, and Tank 49 material is sampled prior to going into Tank 50. WSRC is gaining more knowledge with the testing and sampling and are confident that will be more in the range of 1 million vs. 1.7 million curries.

Open discussions continued on the process and Waste Acceptance Criteria expectations and how at no time can anything that exceeds the maximum permit values be sent. Tank 48 needs to be emptied for space and location because it is an ideal feed tank for the Salt Waste Processing Facility.

### **Salt Processing Programmatic Update**

Dave Amerine, Project Manager, Salt Waste Processing Facility, introduced himself and provided the following Salt Processing Programmatic Update.

#### **What Has Happened This Year**

- Enhanced Preliminary Design was completed on schedule on 9/15/2006.
- Department of Energy (DOE) independent technical review concluded that Salt Waste Processing Facility (SWPF) is ready to proceed to final design.
- Development of the Critical Decision (CD)-2 baseline is in progress with approval anticipated in February 2007.
  - The schedule baseline is aimed at a September 2011 start-up.
  - Construction Plan is based on two full shifts per day with planned overtime each week.
  - Testing and commissioning schedule has been revised to achieve early startup.
- Parsons made some management changes in October.

#### **SWPF Project Major Management Changes**

- Experience in Safety and Environment brought to bear with Bob French who ran similar operation at Idaho and his deputy Alice Doswell who has significant experience with Savannah River Site (SRS) and Department of Health & Environment Control (DHEC)
- Experience in safe on time construction with Chuck Swain taking over and reporting to me directly.
- I have placed engineering test program under the wing of Skip Singer, Startup Manager; but also reporting directly to Jack Kasper, Design Build Manager.
- The new plant manager, Jim Van Vliet, reports directly to me. A focus will be on training. Training is essential for safe construction and for effective testing.
- A more robust project control and project direction role under Bill Pettigrew who has significant experience at SRS, Hanford, and other nuclear projects.

### **What is Coming Up**

- Independent Review of the CD-2 Baseline by Office of Engineering & Construction Management (OECM) in January.
- Startup of the cold operations testing of full scale Caustic Side Solvent Extraction (CSSX) system at EnergySolutions facility in Barnwell, SC in January.
- Independent DOE review of Integrated Safety Management System Implementation in January.

### **Project Risks**

- Congress must act on the FY 2007 budget in order to start construction in 2007. Otherwise a project delay will occur.
- Defense Nuclear Facilities Safety Board (DNFSB) is examining SRS seismic analysis issues and SWPF seismic analysis in particular. Parsons intends to resolve these matters without impact to the project.
- DOE and Parsons have agreed to freeze the design which is conservatively designed and meets DOE standards and Environmental Management (EM) interim guidance for nuclear safety.
- Our Engineering Development & Demonstration (ED&D) test program continues in parallel with design to confirm the design.
- Competition for engineering and construction assets due to other local and regional work including Mixed Oxide (MOX).

### **Caustic Side Solvent Extraction (CSSX) Full-Scale Test (FST) Overview**

- CSSX FST will validate the SWPF full-scale design
- CSSX FST to be conducted December 2006-February 2007
- Test system located at EnergySolutions Barnwell Processing Facility
- Liquid waste simulant will be used for testing

### **Test System Design**

- 11 Full-scale, hanging-rotor contactors at prototypical spacing
- Contactors include cooling jackets and Clean In Place systems
- 4 extraction contactors, 2 scrub contactors, 4 strip contactors and 1 wash contactor
- Hard piping between contactors
- Support systems designed to provide prototypical feed rates for all fluids
- Vent header system provides prototypical headspace pressures

### **System Assembly**

- System fabricated and assembled by Parsons in Pasco, Washington

### **CSSX Hydraulic Performance Testing**

- System hydraulic performance testing conducted by General Atomics at their LaJolla Facility

### **Test Plan Objectives**

- Demonstrate system operation free of gas and liquid hydraulic restrictions
- Determine the stage efficiencies for full-scale, hanging-rotor contactors
- Evaluate contactor performance at elevated flow rates
- Determine minimum flow rates with acceptable system performance
- Evaluate hydraulic performance sensitivity to waste feed density
- Estimate solvent losses in Decontaminated Salt Solution (DSS) and strip effluent
- Demonstrate adequate solvent recovery in full-scale equipment
- Evaluate the CSSX Process response to upset/off-normal conditions
- Optimize the startup/shutdown/flush procedure
- Evaluate solvent quality trends and evaporation rates.

Terry Spears joined the meeting and his input was very well received by the CAB Members. Mr. Spears added valuable information throughout the discussions that demonstrated DOE and Parsons are working

together with project management standards to ensure safety and a successful project completion. Bill Lawless and other CAB members agreed that they want to do anything to help get the Salt Waste Processing Facility operational and acknowledge that it is a critical facility that needs to be built.

**Public Comment:**

- Charles Pair, who is a candidate for the 2007 CAB Board, introduced himself and stated his interest in the Board activities.
- Chris Timmers, who is a candidate for the 2007 CAB Board, introduced himself and stated his interest in the Board activities.
- Stan Howard, who is a candidate for the 2007 CAB Board and works in Tritium at SRS, introduced himself and stated his interest in the Board activities. Mr. Timmers' residence is located at the edge of Aiken County with 56 acre right across from SRS.
- Lee Poe stated that he would like to see caustic side solvent extraction which is the right way to process tank waste. He would like to hear an update on the Salt Waste Processing Facility in the February 2007 timeframe and would like to have Mr. Spear's comments on why MCU is the right process to use is documented in the meeting summary notes.

**Adjourn:**

Mr. Miesenhiemer adjourned the meeting

**Follow-Up Actions:**

The following are the actions items:

Provide an update of Tank Closure status and an update on the Salt Waste Processing Facility testing results in the February timeframe. (Spears/Ling)