The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, June 19, 2007, 5-7 p.m., at the Aiken Federal Building, in Aiken SC.

The purpose of this meeting was to discuss the following:

 Salt Waste Processing Facility – Defense Nuclear Facilities Safety Board Seismic Issues Resolved and the status of the project baseline (*informal remarks by Guy Girard, DOE-SR*),
Status of Transuranic (TRU) Waste Program (*presentation by Bert Crapse, DOE-SR*),

3) Status of PUREX Program (presentation by Mike Simmons, DOE-SR); and

4) Public comments.

### ATTENDEES:

CAB Members	Stakeholders	DOE/Contractors/Others
- Joe Ortaldo, Chair	Russ Messick	Sheron Smith, DOE-SR
- Art Domby, Vice Chair	Lee Poe	Laura Farkas, DOE-SR
- Leon Chavous	Bill McDonell	Bert Crapse, DOE-SR
- Franklin Boulineau	Perry Holcomb	Roy Schepens, Parsons
- Manuel Bettencourt	Jack Roberts	Sharon Barreras, Parsons
- Karen Patterson	Bill Lawless	Willie Clark, Parsons
- Stan Howard		Larry Ling, DOE-SR
Mary Drye	John Contardi, DNFSB - SR	Gordon Hayford, WSRC
Wade Waters	Jim Barksdale, EPA	Sonny Goldston, WSRC
Donna Antonucci	Eric Owens, SCDHEC	Stephanie Zejewski, DOE-SR
Judy Greene-McLeod	Robert Aldin, SCDHEC	Terry Spears, DOE-SR
	Melanie Giorard, SCDHEC	Charlie Hansen, Parsons
		Mike Simmons, DOE-SR
		Guy Girard, DOE-SR

Rick McLeod, CAB Technical Advisor

Tony Polk, DOE-SR

- Waste Management Committee Members

# Welcome and Introduction:

Joe Ortaldo, WMC Chair, welcomed and thanked everyone for attending the meeting. Mr. Ortaldo referenced the meeting ground rules and encouraged participation of all attendees; reviewed the agenda; and asked for introductions.

Mr. Ortaldo reminded all attendees of the upcoming committee meetings on June 25<sup>th</sup> and 26<sup>th</sup>, and the full Board meeting in Aiken, SC, on July 23-24, 2007.

The meeting continued with the introduction of Bert Crapse, DOE-SR, who provided an update of the TRU Waste Program.

# **TRU Waste Program Update**

Mr. Crapse began by stating the purpose of the briefing is to provide a status update of the TRU waste program and address the CAB Recommendation #241, Items 3-6. Mr. Crapse stated that the current SRS TRU waste inventory was approximately 7, 000 55-gallon drums, and approximately 5,000 cubic meters of large box waste, and the waste covered under TRU Pad 1.

Legacy TRU Waste volume has been reduced to less than half of original volume in FY 2001. SRS TRU Waste FY 2007 Activities include:

- Continue Waste Isolation Pilot Plant (WIPP) shipments.
- Achieve Battelle-Columbus commitment to disposition 3,300 drums.
- Continue large container repackaging.
- Initiate waste removal of TRU Pads 7-13.
- Submit RCRA Permit Modification for TRU Pads 1 and 2.
- Start-up large box NDA and NDE systems.

WIPP Shipments Update:

- Two to three shipments per week.
- Averaging 250 300 drums per month.
- Already shipped 2600 drums to WIPP, plan to ship an additional 700 in FY2007.

TRU Waste Drum Remediation Update:

- Drum repackaging in two facilities:
  - Modular Repackaging System in E-Area
  - F-Canyon repackaging lines
- Averaging 170 drums per month.

Large Container Repackaging Update:

- Repackaging Large Steel Boxes at H-Canyon.
- Repackaging 6 Large Steel Boxes in FY2007.
- Assay screening being performed to identify waste less then 100nCi/g for LLW disposal.

Large Equipment NDE and NDA Update:

- Non-Destructive Examination equipment installation complete.
  - Startup testing to begin in July 2007
- Non-Destructive Assay equipment fabrication complete.
  - Factory Acceptance testing complete
  - Delivery to SRS June 2007

Battelle-Columbus Agreement Commitments:

- Disposition 3,300 TRU waste drums in FY2007.
- Remove the Battelle RH-TRU waste from SRS by January 1, 2009.
- Establish a large box certification program at SRS as defined by
  - 1) the fabrication and integrity testing of a TRUPACT-III container by December 30, 2006, and
  - 2) the receipt, installation, and startup (to demonstrate operability) of NDA and NDE equipment for the TRU waste Large box process line at SRS by the end of FY2007.

Open discussions confirmed that the mixed waste disposal is shipped to the Nevada Test Site which is the only facility that will take higher than Class-A waste. Discussions continued with the large box program which requires NRC licensing that takes 12-18 months; agreement of the shipping criteria; risk management; characterization certification; and assay procedures. Prior to repackaging any of the TRU waste, all boxes need to be screened for content and if there is liquid within the container.

Mr. Holcomb asked if the modular repackaging system (MRS) is working efficiently. Mr. Crapse replied that there were some issues in the beginning. When the bag out was in the bottom of the container that process was creating a 'horse tail' and a pressure change. This has been resolved and the MRS is now working well.

Mr. Crapse stated that there may be an opportunity to bring some Oak Ridge (OR) waste with an equitable exchange, but this is very early in discussions, and OR needs to show progress prior to considering.

In summary, Mr. Crapse stated that SRS is continuing shipments of TRU waste to WIPP reducing the Site's legacy TRU waste volume; the Site is meeting commitments with the State; and the Site is investing in the program to characterize large boxed TRU waste in the future. SRS is preparing to submit a RCRA permit and schedule for the TRU Pad 1. Mr. Crapse made a commitment to brief the CAB in the September-October 2007 timeframe with an update of the TRU Waste Program.

# **PUREX Waste Treatment Update:**

Mr. Ortaldo introduced Mike Simmons, DOE-SR, who presented the PUREX Waste Treatment Update.

Mr. Simmons began be stating the purpose of the briefing was to provide an update on the PUREX Waste Treatment Program.

PUREX Treatment history:

- Disposition path for PUREX waste was thermal treatment at the Consolidated Incineration Facility (CIF).
- CIF suspended operation in 2000; alternative treatment needed for PUREX waste.
- CIF Focus Group and Savannah River Site pursued optional alternatives.
- Systems engineering evaluation identified alternative treatments to CIF for both aqueous and organic PUREX.

PUREX Waste Types:

- Legacy PUREX Waste
  - Aqueous PUREX Waste
    - Non-organic liquid from canyon washing operations and old solvent tank closure in E-Area
    - Volume: ~12,500 gallons
    - Classification: Low-level Waste
    - Organic PUREX Waste
      - Actual solvent liquid: Tributyl phosphate/n-paraffin
      - Volume: ~ 25,000 gallons
      - Classification: Mixed Waste
    - F-Canyon PUREX Waste
      - Additional solvent waste generated from F-Canyon deactivation in 2004
      - Volume: ~60,000 gallons
      - Classification: Low-level Waste

PUREX Alternative Treatments

- Legacy Aqueous PUREX
  - Effluent Treatment Facility (ETF)
  - Completed March 2004
- F-Canyon PUREX Waste
  - Commercial solidification
  - Completed April 2007
- Legacy Organic PUREX
  - Commercial solidification
  - Ongoing

Legacy Organic PUREX Treatment Issue

- Vendor lab analysis measured a previously unidentified chemical (naphthalene) in the legacy PUREX solvent.
- Naphthalene is a RCRA Underlying Hazardous Constituent (UHC) requiring treatment to meet the Land Disposal Restriction (LDR).
- PUREX Shipments have been delayed (since April 2007) while vendor performed tests to determine if the solidification technology meets UHC treatment standard for naphthalene.

# PUREX Solvent Path Forward

Complete testing of stabilized solvent and, if necessary:

- Evaluate a treatment variance to macroencapsulate (Stainless steel welded box) solidified PUREX solvent as an alternative to thermal treatment for napthalene or;
- Permafix will pre-treat to entrain phosphorus and then treat by vacuum thermal desorption.

• Either of the above options would likely add 6 to 9 months to the current schedule.

PUREX Schedule Challenge

- Delays to the treatment schedule is challenging the September 30, 2007 STP Commitment date for shipping all of the legacy organic PUREX for treatment.
- SRS is evaluating the need to utilize accumulated Clean-Up-Credits to move STP commitment date.
  - The Clean up credits concept has been previously presented to the CAB (9/8/03).
  - Credits are earned primarily by shipping waste off site e.g., TRU waste, PUREX or pouring DWPF canisters.
  - Credits can be used (1000/6 months) to move STP commitment dates where needed.
- Protocol for using credits per the 2003 Statement of Mutual Understanding between DOE and SCDHEC requires formal notification to SCDHEC in writing at least 30 days prior to the commitment date to be moved and stating how many credits will be used and what is the new commitment date established.
- In actual practice, we will meet with SCDHEC soon after making the final decision to use credits to discuss this issue and our need to move the commitment date.

Conclusion:

- Legacy organic PUREX solvent is only remaining waste left to treat.
- Solidification with organo-clay is still believed to be the treatment method of choice.
- Other treatment enhancements are being pursued for the napthalene.
- Meeting the September 30, 2007 STP Commitment will be a challenge.
- SRS may likely have to use accumulated Clean-Up-Credits to move commitment date for completion of PUREX solvent treatment.

Open discussions included a request for information and a briefing on the delayed schedule and costs created by the resolution of the Naphthalene issue.

### Salt Waste Processing Facility:

Mr. Ortaldo introduced Guy Girard, DOE-SR, who provided informal remarks and a synopsis of the activities on the seismic/geotech issues raised by the DNFSB in January 2007. Mr. Girard stated that based on discussions with the Board and the June 1<sup>st</sup> letter, the seismic/geotech issues have been resolved. He continued by stating that the SWPF project is proceeding with final design of the CPA facility and that an Independent External Review of the project baseline was being performed. The Department anticipates an approval of the baseline with limited construction from the Deputy Secretary in late September and at that point he could share with the CAB members, the baseline schedule and cost. Mr. Girard made a commitment to brief the CAB again in the September timeframe.

The meeting continued with an update on the status to the Saltstone Mod Permit appeal from Mr. Domby who stated that the Department has filed two petitions for consideration by the Administrative Law Judge.

Ms. Greene-McLeod provided an update of the SREL lack of funding, activities, and future expectations.

### Public Comment:

Mr. Lee Poe stated that the public relies on the CAB as a spokesperson for SREL and other issues at the Savannah River Site to include equity issues and the Battelle-Agreement, the Board Beat articles need to be more in-depth, and the regulatory aspects of waste disposition at the Site.

Mr. Art Domby stated that the handling of the termination of SREL by the University of Georgia started several years ago and the value of Science and DOE has lost something very significant and very unfortunate.

Mr. Frank Boulineau stated that DOE will miss the public relations with the community that has been created by the SREL scientists in the classrooms.

# Adjourn:

Mr. Ortaldo adjourned the meeting at 7:00pm.

# Follow-Up Actions:

- 1. A copy of the SREL Letter (Adams to Bodman) and a copy of the Aiken Standard UGA News Release to all CAB members.
- 2. Bert Crapse to provide a briefing to the WMC members in the September-October timeframe on the TRU Waste Program.
- 3. Mike Simmons to provide an update on the delayed schedule and costs of the PUREX Program naphthalene issues in the September October timeframe.
- 4. Guy Girard to provide an update on the SWPF baseline cost and schedule in September.
- 5. Within the next 2-3 months or in the fall the CAB would like to have briefing on the schedules and impacts of the delays in the DPP and the PEP due to the SWPF delays.