Summary Notes, May 8, 2007
SRS Citizens Advisory Board
Waste Management Committee Meeting

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, May 8, 2007, 5:00 – 7:20 PM, at the Aiken Municipal Conference Center, in Aiken SC.

The purpose of this meeting was to discuss the following:

1) Update Status of EPA concerns regarding use of E-Area Trenches for disposal of CERCLA low-level waste *(informal remarks)*;
2) Tank Closure at SRS *(joint presentations from DOE, NRC, EPA, and SCDHEC)*;
3) Liquid Waste Planning *(presentation)*; and
4) Public comments.

Attendance was as follows:

CAB Members	**Stakeholders**	**DOE/Contractors/Others**
- Art Domby	Jack Roberts	Karen Guevara, DOE-HQ
- Alex Williams	Murray Riley	Marty Letourneau, DOE-HQ
- Stan Howard	Perry Holcomb	Sheron Smith, DOE
- Franklin Boulineau	Bill Lawless	Tony Polk, DOE
- Manuel Bettencourt	Ryan Whited, NRC	Jim Moore, WSRC
- Karen Patterson	Rob Pope, EPA	Ginger Dickert, WSRC
Mary Drye	Pete Hill	Steve Thomas, WSRC
	Russ Messick	Terry Spears, DOE
	Elmer Wilhite, SRNL	Helen Belencan, DOE
	Harry Felsher, NRC	Sonny Goldston, WSRC
	Charles Miller, NRC	Kim Hauer, WSRC
	Carolyn Haugabook, EPA	Larry Ling, DOE
	Larry Camper, NRC	Charles Hansen, Parsons
	David Wilson, SCDHEC	
	Turpin Ballard, EPA	

- *Waste Management Committee Members*

Welcome and Introduction:

Art Domby, WMC vice Chair, conducted the meeting. Joe Ortaldo, WMC Chair, was absent due to personal travel. Mr. Domby welcomed and thanked everyone for attending the meeting. Mr. Domby referenced the meeting ground rules, reviewed the agenda, and asked for introductions of all attendees.

Mr. Domby's opening remarks included a thank you to the regulators who took time from their busy schedules to attend the meeting and provide information on their roles, responsibilities, and participation in the 3116 Waste Determinations process. Mr. Domby encouraged all attendees to hold all questions until the end of the presentations. The topics are current and essential to the Citizens Advisory Board.

Mr. Domby reminded all attendees of the upcoming full Board meeting in Savannah, GA, on May 21-22.

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Update Status of Environmental Protection Agency (EPA) Concerns Regarding Use of E-Area Trenches for Disposal of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Low-Level Waste *(Informal remarks from Helen Belencan, DOE-SR)*

Ms Belencan began by stating that EPA and South Carolina Department of Health and Environmental Control (SCDHEC) have asserted that tritium present at the bottom of one of the slit trenches in E-Area represents a release to the environment according to CERCLA rules.

As a result, EPA has issued a notice stating the slit trenches are not acceptable for disposal of waste generated during CERCLA activities – specifically this impact decommissioning actions that were being done under the CERCLA removal actions – also referred to as Engineering Evaluation/Cost Analysis.

On March 22, 2007, DOE-SR and Washington Savannah River Company (WSRC) representatives met with EPA (and SCDHEC by phone) to discuss why the slit trenches are appropriate for continued use. DOE provided information to support this position in three ways:

1. Operation is permitted under a federal program
2. There has not been a release beyond the facility boundary
3. If EPA believes a release has occurred
    a. It is not environmentally significant
    b. It is controlled by an agreement

Ms. Belencan continued by providing the current status, which is only the slit trenches are impacted by the determination – no other facility onsite is presently impacted. EPA is considering the information that DOE-SR provided. At the Combined Committee meeting on May 21, DOE-SR will provide a detailed briefing to the CAB.

In her closing remarks, Ms. Belencan made a commitment to help prepare for the 5/21 meeting, Sheron will be e-mailing you copies of the correspondence between EPA, DHEC, and DOE, and a copy of a white paper DOE prepared and have given to EPA and DHEC to further explain the basis of DOE authority for waste disposal operations at SRS.

Rob Pope, EPA Representative, confirmed that EPA had granted the extension by email informally to continue operations in all SRS facilities except the E-Area Slit Trenches. EPA, SCDHEC, and DOE are working to resolve the issue, but EPA position has not changed since 1996.

Shelly Sherritt, SCDHEC, stated that their involvement is in the programs and legalities appropriate for that unit and applied to this area, controlling the source of tritium is the ultimate goal.

Bill Lawless recommended to the WMC Vice Chair that a draft motion be considered that the issue needs to be resolved expeditiously to allow continued operations and minimize the source of tritium that is disposed in the Slit Trenches.

A Site investigation is expected to be completed by September 30, 2007.

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Tank Closure at the Savannah River Site (SRS) *(Joint presentations from DOE-SR, DOE-HQ, NRC, SCDHEC, and informal remarks from EPA)* This presentation is provided in response to the CAB Recommendation #239, Item #4, DOE, NRC, and SCDHEC make a joint presentation to the SRS CAB on the roles and responsibilities and meeting processes of each agency in the Section 3116 process.

Mr. Domby opened discussions by providing background information. Radioactive Waste that is "high level" waste as defined by law is based on where the waste came from in materials at DOE sites. SRS currently has approximately 36 million gallons of radioactive waste stored in 49 underground tanks. Approximately 34 million gallons of the waste stored at SRS is comprised of salt waste. The remaining two million gallons consists of a waste sludge that has settled to the bottom of the tanks. The salt waste and sludge, taken together, the various technologies that will be used are expected to result in the removal and vitrification through the Defense Waste Processing Facility of 98-99 percent of the total radioactivity currently contained in the waste tanks, while minimizing the time that waste will be stored in the underground tanks, some of which have a known history of leaks. The proposed salt waste treatment and disposal activities were the subject of the Section 3116 Determination for Salt Waste Disposal at the Savannah River Site. The determination was issued by the Secretary of Energy in January of 2006 following 14 months of development, review and consultation with the Nuclear Regulatory Commission to solidifying the post-treatment low activity salt stream at the SRS Saltstone Disposal Facility 71 Federal Regulatory 3838. Tonight we are going to hear from all of the agencies participating in the process and how the process is working for them to addressing waste left in tanks and grouted.

Joint presentations were provided by Tony Polk and Marty Letourneau, (DOE- SR & DOE-HQ); Ryan Whited and Larry Camper, (Nuclear Regulatory Commission); Shelly Sherritt, (South Carolina Department of Health and Environmental Control); and Turpin Ballard, (Environmental Protection Agency), on the Roles and Responsibilities and Processes of each Agency in the 3116 Waste Determination efforts.

All agencies agreed that the ongoing interagency meetings to discuss technical issues affecting the Performance Assessment and the Waste Determination is working well and enhances their ability to achieve resolution of generic technical and policy issues associated with completing Waste Determinations. SCDHEC expressed that SRS is taking way too long to close tanks. Although SCDHEC is not pleased that SRS has not met the tank closure commitments in the Federal Facility Agreement (FFA), they are agreeable to work through these discussions and efforts, progress is being made to close the tanks safely and manage the process. The joint meetings have included technical discussions with a lot of detail on models, tank specific, clarifying basis and input assumptions. Assumptions are based on best available expertise and knowledge.

Tony Polk began the presentations with stating the regulatory closure requirements for closing waste tanks at SRS. DOE, in consultation with NRC, determines a tank may be safely disposed on site as a non-high level waste per Section 3116 of the NDAA. SCDHEC approves, with EPA input, DOE's closure plan for the specific tank or tanks. SRS will close a specific tank or tanks with grout and SCDHEC and EPA approve the Tank Farm Area Closure. It is a very detailed process and requires all regulatory agencies working together. The draft Waste Determination was issued for Tanks 18 and 19 on September 30, 2005.

The National Academy of Science issued a report in early 2006 to recommend DOE continue research on waste removal. The draft Tank Closure Plan was issued to SCDHEC and EPA on 02/02/06. DOE continues evaluation of waste removal technologies. DOE expects a decision on these technologies during the summer of 2007. Process efficiencies are being evaluated.

Discussions continued with closing tanks/systems is a complex process involving DOE, NRC, SCDHEC, and EPA. Performance Assessment is significant to the success of tank closure.

Open discussions continued with Bill Lawless who asked if a point of compliance has been agreed to by DOE and NRC. Mr. Polk replied no. Manuel Bettencourt asked if there were any unresolved issues with the National Academies of Science. Mr. Polk replied none. Bill Lawless stated that it appears to be FY 2010 before any tanks can be closed. Mr. Polk replied, yes, Tanks 18 & 19 closure plans are going to apply the additional new technology during the summer of FY2007. Perry Holcomb asked if DOE is considering grouping "like" type tanks and materials for closure that would be more cost and time efficient to close. Mr. Letourneau replied that grouping was an issue in the beginning of discussions with the NRC, and now there is a criteria that could allow grouping. Like tanks are being grouped together.

Liquid Waste Planning *(Presentation provided by Tony Polk, DOE-SR)*

The meeting continued with Tony Polk, DOE-SR, providing a presentation on the Liquid Waste Planning at SRS that ensures safe operations, achieves tank closure FFA commitments, dispositions radioactive liquid waste from non-compliant tanks, continues legacy material stabilization, and starts the Salt Waste Processing Facility at its highest possible capacity.
Waste Disposition Programmatic Objectives are:

- Safe Operations
- Achieve Tank Closure FFA Commitments
- Disposition Radioactive Liquid Waste from non-compliant tanks
- Continue legacy material stabilization
- Start the SWPF at its highest possible capacity

Consensus Goals are:

- Reduce risk by removing waste from tanks and closing tanks
- Give priority to removal of actinides
- Maximize radioactivity disposed to the Federal Repository
- Startup and operate ARP/MCU and SWPF
- Keep salt processing schedule in alignment with sludge processing
- Limit on-site disposal
- Ensure public involvement

Approach - Safely Stabilize and Dispose of Radioactive Liquid Tank Waste

- Eliminate risks versus managing risks
- Protect the public, the workers and the environment
- Reduce life cycle schedule and cost

Risk Reduction - SRS waste disposition plans target the highest risks first

- Vitrification and disposal of sludge waste
  - Highest concentration of long lived radionuclides
  - ~ 10 % by volume and ~ 50 % of activity
- Stabilization of old-style tanks
  - 13 have leakage history

Mr. Polk provided a photo example of Prior Leakage from Primary Tank into Secondary Pan of a leaking tank. Then he showed several slides that included the following diagrams and photos:

- SRS Liquid Waste System to include Savannah River Site Tank Farm System;
- Composite Inventory;
- Impact of Sludge Disposition on Tank Farm Space;
- Impact of Saltcake Dissolution;
- Impact of Processing Supernate;
- SRS Liquid Waste Inventory (12/31/06); and
- The Risk of Delayed Interim Salt Waste Processing on Tank Farm Space.

Mr. Polk stated that it is critical to continue interim salt processing under the modified Saltstone Disposal Facility permit to meet FY2010 Tank Closure Regulatory FFA Commitments and to prevent significant sludge processing delays. Delays in interim processing beyond the original 10/2005 need will be mitigated by projects that include:

- Build new lag storage tanks
- Design and construct Fluidized Bed Steam Reformer for Tank 48 waste treatment
- Use new technologies for Tanks 1-3 waste treatment
- Assure continued operation of 2F Evaporator
- Reduce tank closure schedules (characterization, WD, consultation, grouting) from 39 months to 24 months

In conclusion, Mr. Polk stated that SRS continues to eliminate risk by processing and vitrifying sludge waste; tank space management issues increase the risk of sludge processing delays, interruption of DWPF operation, and delays to tank closures. SRS must continue with interim salt processing to create space. DOE-SR plans to ensure the CAB members are involved and informed of risks and opportunities as we move forward.

After this presentation, Mr. Domby led the discussions on the CAB position paper on the Saltstone Permit Mod appeal process. He stated that the CAB's position is to minimize the impact to the overall schedule and reduce the risks associated with storing waste in the aging tanks. The CAB is requesting that the review of the merits of the appeal be conducted in the most expeditious manner and the stay be lifted so operation of the interim processing of salt can continue while legal decisions related to this proceeding is considered.

Public Comment:
None.

Adjourn:
Mr. Domby adjourned the meeting at 7:25pm.

Follow-Up Actions:
Forward a copy of Liquid Waste Planning slides to Bill Lawless.
Bill Lawless to provide a draft motion on the E-Area Slit Trenches disposal of CERCLA wastes