

**SRS Citizens Advisory Board
Waste Management Committee Meeting
Aiken Municipal Conference Center, Aiken, SC
February 20, 2007**

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Waste Management Committee (WMC) met on Tuesday, February 20, 2007, 5:00 PM, at the Aiken Municipal Conference Center, in Aiken SC. The purpose of this meeting was to discuss 1) The impacts of EPA concerns regarding use of E-Area Trenches for Disposal of CERCLA Low-Level Waste; 2) Status of Saltstone Disposal Facility Permit Modification Appeals; 3) The Salt Waste Processing Facility – Response to the Defense Nuclear Facilities Safety Board (ltr. dated 01/10/07); and to hear public comments. Attendance was as follows:

CAB Members

- Joe Ortaldo
- Alex Williams
- Art Domby
Wendell Lyons
Leon Chavous
Stan Howard
Manuel Bettencourt
Mary Drye
Cynthia Gillard-Hill
Judy Greene-McLeod
Bob Meisenheimer
Karen Patterson

Stakeholders

Lee Poe
Ted Millings
Jack Roberts
Elmer Wilhite
Chris Timmers
Perry Holcomb
Bill Lawless
Bill McDowell

*Rick McLeod, V3

DOE/Contractors/Others

Terry Spears, DOE
Larry Ling, DOE
Sheron Smith, DOE
Julie Peterson, DOE
Mike Mikolanis, DOE
Helen Belencan, DOE
Guy Girard, DOE
Howard Pope, DOE
Jim Moore, WSRC
Robert Campbell, WSRC
S. A. Thomas, WSRC
Luke Reid, WSRC
Steve Thomas, WSRC
Charles Hansen, Parsons
Mark Sautman, DNFSB
Kent Fortenberry, DNFSB
Ted Millings, SCDHEC
Keith Lindler, SCDHEC
Rick Caldwell, II, SCDHEC
Jennifer Hughes, SCDHEC
Shelly Sherritt, SCDHEC
Don Siron, SCDHEC
Rob Pope, EPA

- Waste Management * CAB technical advisor
Committee Members

Welcome and Introduction:

Joe Ortaldo, Chair, welcomed and thanked everyone for being at the meeting. He introduced himself as the new Waste Management Committee Chair and recognized the new Committee Vice Chairs as Art Domby for Liquid Waste and Alex Williams for Solid Waste. Mr. Ortaldo asked everyone to introduce themselves.

Mr. Ortaldo referenced the meeting ground rules, reviewed the agenda and encouraged everyone to be brief due to the full agenda and the expected significant interest in the meeting topics. He stated that there will not be formal slide presentations this evening, but informal discussions with questions and clarification.

Mr. Ortaldo reminded all attendees of the joint Strategic & Legacy and the Facilities Disposition & Site Remediation meeting scheduled next Tuesday, 02/27/07, at the North Augusta Community Center. He provided the following topics and encouraged attendance. The topics for next week's meeting are Carolina Bays; Groundwater Strategy; and Budget Update.

Tonight's meeting began with Helen Belencan and Howard Pope, both from DOE-SR, providing information on the Impacts of Environmental Protection Agency (EPA) concerns regarding use of E-Area Trenches for Disposal of CERCLA Low-Level Waste. A copy of the letter from J. I. Palmer, Jr., Regional Administrator, EPA to Jeff Allison, Manager, DOE-SR, dated 02/16/07, SUBJECT: Notice of Unacceptability for all CERCLA Off-Suite Rule Units Savannah River Site, Aiken, SC, was provided to the Board members.

Ms. Belencan opened the discussions by stating that at the CAB meeting in Hilton Head last month, EPA expressed their concerns regarding DOE's low level waste (LLW) disposal operations, specifically the slit trenches. She continued stating that Howard and I are here tonight to provide you an update.

Ms. Belencan stated as you know, SRS operates this low-level waste disposal facility in full compliance with applicable requirements under its Atomic Energy Authority and according to DOE Waste Management Order 435.1 and in a method that assures the protection of the worker, the public, and the environment. She then introduced Howard Pope as the DOE manager for our disposal operations, who provided additional background.

Howard Pope provided the following Waste Management Operations Synopsis.

- SRS performs long term performance assessment modeling to set waste acceptance requirements and disposal limits to ensure that DOE 435.1 requirement and the Environmental Protection Agency's drinking water standards are met.
- SRS has installed monitoring devices around individual disposal units to demonstrate that the Environmental Protection Agency's drinking water standards are met.
- The Slit Trenches are operated to ensure they are in compliance with DOE Order 435.1 disposal authorization statement.
- DOE closely monitors the tritium at the slit trenches to ensure the facility continues to operate in compliance with its DOE Order 435.1 disposal authorization statement.
- Monitoring and groundwater modeling provide assurance that the tritium does not exceed permitted concentration limits and, in fact, would be an early warning indication of any developing problem.
- The operations of the SRS E-Area slit trenches do not pose an impact or risk to the health and safety of the SRS workers or the public.
- DOE has been sharing information regarding the E-Area disposal facility since 2005 as part of the DOE's team approach for involving EPA and South Carolina Department of Health and Environmental Control in site cleanup activities.
- EPA sent a letter on January 31 indicating they had reviewed several DOE documents on the performance of low-level waste disposal in E-Area and has concerns.
- DOE has responded to EPA with the 15 day notification period indicating that DOE will perform a site evaluation in accordance with the SRS Federal Facility Agreement and provide EPA and SCDHEC with a report of our findings.

Ms. Belencan closed the discussions with at this time we are not generating CERCLA waste in quantities that present a waste disposal concern and DOE will continue to evaluate our needs and

options and will keep you informed. Ms. Belencan then turned the discussions over to Rob Pope, EPA, for him to provide the EPA position.

Mr. Robert Pope, EPA, stated that in January EPA issued a letter of the release of tritium based on the CERCLA definition, which means that the tritium moved outside of the trenches. EPA had not paid too much attention to E area prior to large volumes of D&D waste being disposed at the facility. He continued that DOE had briefed EPA in 2005, which was 2004 data, and EPA had to absorb the data and try to understand the DOE position. After closer review, EPA concluded even though DOE is operating by DOE Order, it still does not meet the EPA CERCLA requirements. What triggered the "release letter" and the rescinding of the Off Site Acceptability was the first D&D EECA from F Area. Although EPA has issued the letter of Notice of Unacceptability, DOE has the right to appeal through the Offsite coordinator and the Regional Administrator. The release is not an immediate threat to human health. EPA, SCDHEC, and DOE are talking and working the issues.

Status of Saltstone Disposal Facility Permit Modification Appeals

Informal remarks were provided by Shelly Sherritt, SCDHEC, on the status of the permit approval and recent appeal denial. Ms. Sherritt stated that the SCDHEC felt technically sufficient of the Saltstone Permit Mod decision and that they had met with State officials on the closure of waste tanks at the Savannah River Site. On February 6th, SCDHEC received a request for review of their permit decision from a host of parties collectively. SCDHEC held a public meeting to review the request and decided not to hear the request as an appeal. As a result of the Board's decision not to hear as an appeal, a letter will be issued tomorrow (02/21) in response. When the letter has been received by all parties, the permit will be effective. At this point, the permit is valid and will be until any appeals are sent to an Administrative Law Office or Administrative Law Judge (ALJ) for review within 30 days. Jack Roberts asked if Ms. Sherritt knew of anything that would indicate what or why someone would appeal. Ms. Sherritt replied nothing at this time. Bill Lawless asked why SCDHEC made the decision to dismiss. Ms. Sherritt replied that the Board's decision was based on what is important to the State. Art Domby asked once an appeal is sent to the ALJ and they have an active proceeding, can the Judge make it a permit. Ms. Sherritt stated that if it goes to an ALJ, then DOE and SCDHEC will partner and address the concerns, appeal specifics, and that after the ALJ court recognize the appeals, the decision would be in the State venue.

Larry Ling, DOE-SR, stated that we plan to proceed with the Deliquification, Dissolution, and Adjustment (DDA) Batch 1 processing early next week.

Joe Ortaldo invited Shelly Sherritt to provide informal remarks at the Waste Management Committee meeting on March 6th to keep the CAB members and the public updated on the status of the Saltstone Mod permit decision.

Salt Waste Processing Facility - Response to Defense Nuclear Facilities Safety Board (DNFSB) (ref. ltr. dated 01/10/07)

Mike Mikolanis and Guy Girard, DOE-SR, presented an update on the SWPF geotechnical concerns and design issues and the reason for the delays for evaluation and resolution. Kent Fortenberry, HQ-DNFSB, attended the meeting and provided the DNFSB position which accepts the DOE response and will continue to work with DOE to ensure the facility meets the necessary standards. Open discussions reinforced the need to build a useful facility and the CAB

members concerns of the SWPF delay. Several CAB members and the public expressed their continued concern of the possibility of a 50-year old tank leak being a significantly higher risk to the public and environment than the structural facility concerns. The CAB plans to develop a draft motion on the Liquid Waste Systems Approach.

Mike Mikolanis, DOE-SR, began discussions by stating that at the last meeting, he made a commitment to provide an overview of the Independent Technical Review (ITR) and the DNFSB letter of 1/10/07. As agreed, Mike provided information on the response DOE issued to the DNFSB.

There were three key areas covered by the DNFSB letter:

- Software Quality Assurance (SQA): DOE identified problems with the application of structural design program (GTSTRUDL). Parsons concurred and initiated a thorough assessment of project QA practices. The results were documented in a report which led to development of a corrective action plan. These actions are being worked and are expected to correct the specific issues identified as well as the underlying cultural issues (e.g., lack of a questioning attitude) which led to the quality assurance problems cited in the DNFSB's letter.
- Significant delay issuing a geotechnical report: Neither the Department or Parsons are pleased with the difficulties encountered with completing geotechnical field investigations and issuing a geotechnical report. This report should have been completed by this stage of design, and the project compensated by allowing preliminary design to precede using assumptions bounding recent results obtained from a nearby Hazard Category 2 nuclear facility at SRS (GWSB#2). These assumptions will be checked and validated against the results of the SWPF geotechnical report. It is of some significance to note that the ITR team also expressed concern regarding delays issuing a geotechnical report, but that team also concluded we could address impacts during final design activity.
- Specific Structural Comments: The DNFSB had a number of comments related to specific aspects of structural design. Many are linked to issuance of the geotechnical report. While these comments are significant to confirming facility design, the ITR team concluded these issues could be resolved during the normal course of final design activity.

Mike continued to reiterate the point of the DNFSB letter was to communicate issues thought to be significant and urge the Department to maintain focus on these issues and drive them to closure – on that point we also agree. The significance of these problems must be understood before the project moves into final design. We do not intend to proceed with Critical Decisions for this project until the geotechnical and structural issues have been adequately resolved to substantially reduce uncertainties in these areas.

The project has taken action to bring additional expertise to address these issues. Parsons has contracted a team of nationally recognized civil/structural experts. The team is reviewing aspects of the design to recommend a more detailed analysis plan for final design. DOE-SR has directed Washington Savannah River Company to complete an evaluation of the settlement profile using preliminary geotechnical data which will be provided. The Department has brought in an experienced Project Director, Guy Girard, and additional technical resources are being applied to strengthen DOE-SR oversight of SWPF design activity. Expertise from the Independent Technical Review team will be brought back to review resolution of geotechnical and civil/structural issues identified in their report.

Several CAB members stated that they recognize and agree that the SWPF must be designed, constructed, and operated to provide reasonable assurance for the safety of

workers, the public and the environment. Their emphasis is on the reasonable as it relates to the margin of safety and likelihood for a major earthquake during the SWPF operating life. The CAB members expressed that they very much want to be supportive of the design issues raised by DNFSB and the well-designed counterclaims made by DOE and Parsons. However, they want to see the quantitative analysis that supports these decisions when all parties use a process that looks at the entire system not just a single facility design. They strongly expressed that they want DOE to incorporate a systems approach, which evaluates risks and cost-benefit analyses across the entire liquid waste operating system. This analysis should reconcile the needs to build SWPF to withstand a major earthquake against the needs for the timely removal of waste from the liquid radioactive waste system.

When asked about delays, relative risks and options considered, Mike reminded the CAB that the Department established design requirements commensurate to the hazards of the facility. Although there may be some schedule impacts to accommodate design issues such as these, it would be even worse (in terms of relative risk) to complete construction of a design which did not meet established requirements and then not be allowed to start up that facility.

The CAB members agreed to submit a recommendation to provide a quantitative systems-approach analyses for the liquid radioactive waste system that support the SWPF design decisions and to explain to the methods used to evaluate the risks across the liquid radioactive waste system and present their potential impact on cost, schedule, and safety and any proposed mitigation strategies.

Public Comment:

Lee Poe stated that the discussions at this meeting were not very useful because the documents being discussed were not provided prior to the meeting. Without a formal presentation, the attendees are at a disadvantage to comment.

Bill McDowell stated that he was impressed with the strong discussions and that if we build a facility that is not acceptable then we are placing the larger picture at risk and we are not going to operate if not acceptable which would extend the exposure to the tanks and still can not operate.

Adjourn:

Mr. Ortaldo adjourned the meeting

Follow-Up Actions:

The following are the actions items:

Prepare a draft motion for the Liquid Waste Systems Approach