



## SRS Citizen's Advisory Board

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Facilities Disposition and Site Remediation

Committee Meeting

Aiken Municipal Conference Center, Aiken, SC

May 10, 2006

The Savannah River Site (SRS) Citizens Advisory Board (CAB) Facilities Disposition and Site Remediation Committee (FD&SR) met on Wednesday, May 10, 2006, 5:00 PM, at the Aiken Municipal Conference Center, Aiken, SC. The purpose of this meeting is to review and discuss the SRS P-Area Operable Unit; SRS Soil and Groundwater Project Overview, and public comments.

Attendance was as follows:

**CAB Members**

Bob Meisenheimer  
-Cynthia Gilliard  
- Wendell Lyon  
- Mary Drye  
Manuel Bettencourt  
Joe Ortaldo  
-Mercredi Giles  
Tracey Carroll  
Alex Williams  
-Leon Chavous

**Stakeholders**

Jack Roberts  
Leroy Godfrey  
Perry Holcomb  
Murray Riley

**DOE/Contractors**

Chris Bergren, BSRI  
de'Lisa Bratcher, DOE  
Wade Whitaker, DOE  
Helen Belencan, DOE  
Paul Sauerborn, WSRC  
Mary Flora, WSRC  
Bill Erickson, DOE  
Mary Bennington, DOE  
Michael Graham, BSRI

**Regulators**

Jim Barksdale, EPA  
Chuck Gorman, SCDHEC

- *FD&SR committee members*      \* *CAB technical advisor*

**Welcome and Introduction:**

Mary Drye, Chair, welcomed those in attendance and asked that they introduce themselves.

**Soil and Groundwater Project Overview:** Mary Flora stated that the Soil and Groundwater Project is responsible for waste site, groundwater and surface water remediation as required by federal and state regulations. There are 515 waste sites at SRS, such as seepage basins, rubble pits, rubble piles, and disposal facilities, thirteen major groundwater plumes and six integrator operable units dealing with major surface streams and watersheds, which are included in 14 completion areas.

The Soil and Groundwater Program objectives are as follows:

- Work in partnership with the EPA, SCDHEC to complete SRS's waste site cleanup activities and reduce risk
- Implement an area by area remediation strategy to complete cleanup in whole areas of SRS
- Deploy and utilize cost-effective technologies and natural remedies such as bioremediation, phytoremediation, and monitored natural attenuation.
- Monitor completed waste sites to ensure protection of human health and the environment
- Continue to maintain a strong working relationship with the Citizen's Advisory Board (CAB)

Ms. Flora pointed out that the site operates under both RCRA and CERCLA. RCRA regulates the management of both hazardous and non-hazardous waste; it is administered by SCDHEC under a permit issued to SRS in 1987. Ms. Flora stated that the permit provides for corrective action. The permit is renewed every ten years. The RCRA program path forward is to continue groundwater remediation system operations, continue source area characterization and remediation, and address the solid waste management units through the Federal Facility Agreement (FFA). The CERCLA component addresses risk to human health and the environment resulting from releases or threatened releases of hazardous substances (radionuclides and chemicals). Ms. Flora noted that SRS was added to the National Priority List (NPL) in 1989 as a Superfund Site. The FFA is required for federal facilities listed on the NPL. The FFA is a tri-party agreement between EPA, SCDHEC and the DOE that directs the comprehensive remediation of the Site, meet both CERCLA and RCRA requirements and includes lifecycle cleanup schedules for waste units. Mr. Whitaker noted that the SRS CAB was formed as a result of FFA public comments. The FFA has six major appendices as follows:

- Appendix C: RCRA/CERCLA Units (list of units to be evaluated and remediated as required)
- Appendix D: Current Fiscal Year Enforceable Milestones
- Appendix E: Current Fiscal Year Long-Term Projections-Enforceable two-year profile of work and out-year commitments
- Appendix G: Site Evaluation List – Areas to be screened for preliminary assessments
- Appendix H: RCRA – Regulated Units
- Appendix K: Facilities to be Decommissioned

Ms. Flora introduced the Area Completion Approach as a systematic approach to completing cleanup work integrating Deactivation and Decommissioning (D&D) and SGP scope. The historical process did not focus on any single area, and evaluated each waste unit individually with much paperwork and higher costs and did not address D&D facilities. As Ms. Flora points out today's process addresses grouping of waste units and facilities in a geographic area, integrates D&D and SGP cleanup where area end states are determined up front in the project and economies of scale in sampling, remediation, and documentation are embraced.

Mr. Whitaker identified that there were successful projects within SGP such as:

- General Separations Area Consolidation Unit
- P-Reactor Seepage Basin
- R-Reactor Seepage Basin
- Chemicals, Metals, Pesticides Pits
- C-Reactor Groundwater
- M-Area Operable Unit
- T-Area Completion

Mr. Whitaker stated the FFA path forward emphasizes continued work on waste sites, area completions, groundwater, and the IOU program.

Questions and comments that arose from this presentation were:

Manuel Bettencourt stated that it was important for the continued integration of SGP and D&D for the success of area completion. Joe Ortaldo asked if there was a PA regarding what could be left behind in the reactor, and was told that the team is working with all involved to determine the path forward that would work best. Jack Roberts asked if the Par Pond was a part of the 515 waste units identified at SRS. Mary Flora stated that Par Pond had been accounted for in the 515.

**P-Area Operable Unit:** Mary Bennington stated the purpose of this presentation is to provide a general overview of P-Area its processes, operations, past and present configuration and define the components of the Operable Unit. Ms. Bennington stated that P-Area Reactor is one of five reactors and the second to go operational and went critical on February 20, 1954. The cooling water from the reactor was released to Steel Creek from 1954-1961, and after 1961, the cooling water was released to Pond C (Par Pond). The reactor suspended operations in 1988 and placed in cold shutdown on 1991.

Chris Bergren stated that the P-Area Operable Unit is comprised of 11 subunits:

- Five Federal Facility Agreement ( FFA) Operable Units (OU)
  - o Potential release from the P-Area Disassembly Basin
  - o Process Sewer Lines as Abandoned
  - o Cask Car Railroad Tracks as Abandoned
  - o Potential Release from the Cooling Water System
  - o Ash Basin

- One Structure
  - Reactor Building (105-P) and its ancillary structures (Engine Houses(108-1P and 108-2P))
- Five Potential Source Areas (PSAs)
  - PSA 1: Emergency Cooling Water Retention Basin
  - PSA 2: Area around the Cooling Water Effluent Sumps
  - PSA 3A: Area north of the Reactor Building
  - PSA 3B: Area west of the Administrative / Maintenance slab
  - PSA 4: Area east of the Reactor Building
  - PSA 5: Two localized areas in the southwestern part of P Area

Mr. Bergren stated that there are five investigative units have been identified for PAOU based on location, grouping, and understanding of the subunits that comprise the Operable Unit; and designed to allow for subunit and overall investigative unit characterizations, as needed. Mr. Bergren noted that most of the subunits are associated with subsurface contamination and designed to address problems warranting action from a contaminant migration and Principal Threat Source Material (PTSM) perspective rather than a surficial risk.

Mr. Bergren noted the schedule as follows:

- Multiple information / scoping meetings from November of 2005 to the present
- Submitted RFI/RI work plan in March of 2006
- Initiated pre-work plan characterization in March 2006
- The Record of Decision (ROD) issuance is planned for October of 2009
- Remedial action will start in January 2010

Mr. Bergren stated that SRS, EPA and SCDHEC are committed to developing a public involvement plan for PAOU; the plan is in the early stages of development and will be shared with the public when it is completed.

In conclusion, Mr. Bergren stated that P-Area Operable Unit is well defined in scope and size; the likely constituents of concern are known (tritium, cesium and solvents) and characterization is ongoing. This is the first area completion involving a hardened facility (reactor).

Questions and comments that arose from the presentation were:

Perry Holcomb suggested that a Cost/Benefit analysis is an important consideration in determining the reactor end state. Helen Belencan stated that in-situ was an option in lieu of dismantling and disposal in E-Area, and in-situ is a cost effective end state.

Bob Meisenheimer and Bill Willoughby suggested benchmarking reactor end states at other DOE complex facilities and use those findings as appropriate at SRS.

**Public Comment:** Perry Holcomb stated that the presentations were excellent and that the proposed motion on the P-Area Operable Unit is excellent. Bob Meisenheimer stated the same regarding the motion and hopes that the site will look at others DOE complex sites for good information regarding the closure of hardened facilities like reactors and canyons.

**Adjourn:**

Mary Drye adjourned the meeting at 6:50 P.M.