
Savannah River Site Citizens Advisory Board (CAB)



2005 ANNUAL WORK PLAN

March 3, 2005

INTRODUCTION

The Savannah River Site (SRS) Citizens Advisory Board (CAB) is composed of 25 individuals from South Carolina and Georgia. After original members were chosen by an independent panel of citizens from approximately 250 applicants, the board members today still reflect the diversity of the population affected by SRS. The members, who can serve up to three consecutive two-year terms, represent business, academia, labor, local government, environmentalists, special interest groups, and the general public. Two of the members specifically represent economically disadvantaged persons.

The Board is sponsored by the U.S. Department of Energy Office of Environmental Management and is chartered under the Federal Advisory Committee Act. The CAB provides advice and recommendations to the Department of Energy (DOE), the Environmental Protection Agency (EPA) Region IV, and the South Carolina Department of Health and Environmental Control (SCDHEC) on environmental restoration, waste management and related issues. The CAB uses issues-based Committees to focus on various topics. These issues-based Committees may form working groups or public focus groups to concentrate on a specific issue. The four issues-based Committees of the CAB are:

- Strategic and Legacy Management
- Waste Management
- Facility Disposition and Site Remediation
- Nuclear Materials

Although there are a variety of issues of interest to the CAB, there are limits to available time and resources. The purpose of this Work Plan is to establish priority issues for each of the Committees, and therefore for the CAB. It allows all Board members to be involved in setting the direction of the CAB, even for the Committees of which they are not members. It allows the CAB to prioritize resource expenditures (people and dollars), and also control the establishment of focus and working groups.

The Work Plan covers approximately the next calendar year. The Committee chairs will strive to structure their activities to focus on the priority issues. It is understood that other issues may present themselves, resulting in deviation from the Work Plan. Deviating from the Work Plan is at the discretion of the Committee Chairs, however, they should inform the CAB when this is required.

ISSUES-BASED COMMITTEE DESCRIPTIONS

Strategic and Legacy Management Committee

The Strategic and Legacy Management (SLM) Committee is involved in strategic issues relevant to the future of the Savannah River Site. This includes long-term policy, planning and other “cross cutting” issues related to other CAB Committees. Its work includes many programmatic topics. Specific areas of interest are development and deployment of technology, the SRS budget decision-making process, future land use, legacy management/long term stewardship, historic preservation and relevant national environmental policy. It encourages other CAB committees to integrate the notion of long-term stewardship into issue deliberations and CAB recommendations.

Waste Management Committee

This Committee addresses the treatment, storage and disposal of various waste streams, including transuranic waste (TRU), low-level waste (LLW), mixed low-level waste (MLLW) and high-level waste (HLW) and the interim closure of associated HLW facilities. The Committee does this with the goal of reducing the highest risk to the public, workers, and the environment while complementing the priorities of accelerated cleanup. The Committee also addresses issues related to transportation of waste and Environmental Management Integration, exclusive of the nuclear materials program.

Facility Disposition and Site Remediation Committee

This Committee addresses the remediation of contaminated areas at SRS and addresses the various types of waste units, groundwater and surface water contamination. The Committee deals with issues related to the Federal Facility Agreement (FFA), risk management/risk assessment, funding, the regulatory process and other cross cutting issues that pertain to environmental restoration. The Committee also follows deactivation and decommissioning (D&D) actions taken to reduce risk and costs following a shutdown of an industrial, radioactive, or nuclear facility.

Nuclear Materials Committee

This committee was established to study issues that involve nuclear materials (generally uranium and plutonium) that have an impact on present or future SRS activities. Issues include spent nuclear fuel program activities (foreign and domestic), nuclear materials management and nuclear materials integration. The committee addresses the consolidation, storage and disposition issues related to the legacy materials that were once part of the nuclear weapons production cycle that are no longer needed for their original purpose, but are not considered waste.

SRS CAB 2005 PRIORITY LIST

This Priority List is the result of a survey taken of the CAB members at the January 2005 CAB meeting in Hilton Head Island, South Carolina. The CAB members were given a list of 18 issues identified as priorities by the individual issues-based committees. The members were asked to rank the issues in order of their personal priority, with 1 being their highest priority and 18 being their lowest priority. The results of the survey were used to establish the list of issues described below in order of priority ranking.

1. High Level Waste Disposition- Waste Management Committee

Issue Description. This topic involves a combination of low curie salt, the actinide removal process, saltstone, waste removal, interim tank and associated infrastructure closure, and salt waste processing. The U. S. Congress passed the National Defense Authorization Act of FY05 which included provisions for determining which portions of nuclear wastes do not require permanent isolation in a deep geologic repository. Section 3116 allows DOE, in consultation with the Nuclear Regulatory Commission (NRC) and possibly the National Academy of Sciences, and pursuant to a State of South Carolina permit or closure plan to move forward with salt waste processing plans and tank closures. FFA commitment dates have been revised for the next two tank closures to October 31, 2006, (Tank 19) and February 28, 2007, (Tank 18).

Importance: *The CAB will closely follow implementation of Section 3116, processing of salt waste, and tank closure to ensure continued momentum in the accelerated cleanup. SRS activities supporting the processing and disposal of salt waste from the Nuclear Waste system as well as tank closures are key to the accelerated cleanup strategy.*

2. Disposition of EM-Owned Plutonium and Orphan Material Without A Disposition Path That May Come to SRS-Nuclear Materials Committee

Issue Description. Changes to the Surplus Plutonium Disposition Program during FY'02 led to the cancellation of the proposed Immobilization facility. The specific disposition path for this nuclear material has not been determined, but a proposed strategy is expected in the coming year. Cost effectiveness and security aspects of plutonium management are some of the issues that are being evaluated and while no decision has been made, the committee will continue to monitor to see how SRS plays a role in the future. As DOE continues with accelerated cleanup activities, there remains a small inventory of miscellaneous nuclear materials without a disposition path.

Importance: *The expedited development of a complete, integrated and well-considered plan for the disposition of all excess plutonium is needed to preclude unnecessary long-term storage of plutonium at SRS*

3. Transuranic (TRU) Waste Program – Waste Management Committee

Issue Description. Shipments of transuranic (TRU) waste to the Waste Isolation Pilot Plant (WIPP) began in 2001. Drummed waste is now being shipped to WIPP using temporary or existing facilities to prepare and characterize the waste. Approximately half of the 30,000 TRU waste drums have already been shipped to WIPP. High activity TRU (mostly Pu238 wastes) and non-drummed TRU waste remains a challenge, but innovative approaches are being explored for a cost-effective means to prepare these wastes for shipment. Consistent with SRS acceleration initiatives, work is underway to use existing facilities whenever possible to package/repackage for transportation and compliance with WIPP waste acceptance criteria.

Some of the challenges facing the acceleration of TRU waste shipments include:

- Success of the Modular Repackaging Facility (Los Alamos Gloved Box) for drum remediation
- Nuclear Regulatory Commission approval of:
 - the TRUPACT III shipping containers in time to support the FY08 completion of legacy TRU wastes
 - the TRUPACT II Safety Analysis Report (Rev. 21) and
- Regulatory relief on transportation for curie and wattage (for high activity TRU)
- Large container assay and x-ray equipment
- WIPP support of the SRS accelerated shipping rate including transportation resources and certification of large container characterization equipment
- Limited intrusive repackaging for large containers and high curie drum waste
- Utilization of existing SRS facilities for repackaging/remediation of high activity Pu-238 non-drummed waste while ensuring worker safety
- Obtaining RCRA Part B permit(s) for closure of appropriate pads

Importance: *Stakeholder involvement is needed to ensure the challenges faced by the Transuranic Waste Program remain a high priority for SRS.*

4. Plutonium Storage & Surveillance at SRS-Nuclear Materials Committee

Issue Description. The safe, secure storage of plutonium is ongoing at the K Area Material Storage (KAMS) facility. An alternative surveillance capability for plutonium storage packages is needed to support plutonium storage after material stabilization. The surveillance capability is required in addition to the storage racks to support FB-Line deinventory. Activities to complete the design and initiate construction for the surveillance capability are expected in 2005-06.

Importance: *Policy decisions that may result in the consolidation of the nation's legacy plutonium to one location are a high environmental and homeland security priority for SRS stakeholders and the nation.*

5. Spent Fuel Storage and Disposition- Nuclear Materials Committee

Issue Description. The Environmental Management (EM) team evaluating Nuclear Materials will determine a suitable disposition strategy for spent fuel in the near future. In the meantime, SRS continues to receive foreign and domestic fuel rods in L-Basin for safe storage of Spent Nuclear Fuel awaiting its final disposition.

Importance: *This issue is a high environmental and homeland security priority for SRS stakeholders and the nation and the international community.*

6. Budget Development / Gold Metrics – Strategic and Legacy Management Committee

Issue Description. Funding, risk-based priorities and performance-based incentives are critical for completing the EM accelerated cleanup mission at SRS. Assuring that SRS has adequate funding and that funding is being allocated to the greatest risk reduction projects is of utmost interest to the CAB and stakeholders. For stakeholder inputs to be of any consequence, early and constant involvement is required in the budget decision process. Critical to the funding process is the monitoring of project completion. The Gold Metrics or performance metrics informs SRS management as well as the stakeholders of the progress of the work being accomplished.

Importance: *The budget is the driver of all site initiatives and the Gold Metrics measure the performance of work to that budget.*

7. End State Vision Document – Strategic & Legacy Management Committee

Issue Description. The End State Vision is intended to describe DOE-SR's cleanup vision as driven by well-defined, risk-informed end states. Remediation will be defined to achieve end states as agreed upon with the SCDHEC and EPA as appropriate and with stakeholder input. The End State Vision will be used to communicate the desired environmental conditions at SRS upon completion of the EM mission in 2025.

Importance: *This is a high priority of DOE-HQ and other CABs. It is the planning tool that will guide the direction of clean up of the site and will involve the full SRS CAB in all aspects of the site. Also important to other SRS CAB issues-based committees.*

8. H-Canyon Complex Utilization – Nuclear Materials Committee

Issue Description. All nuclear materials processing in F-Canyon has been completed and work is underway that will lead to its final end state. The eventual shutdown date for H-Canyon is dependent, in part, on a determination of the need for H-Canyon to stabilize and/or disposition any additional materials. H-Canyon is able to dissolve and process significant quantities of enriched uranium including material that is up to 93% U-235. H Area can also handle plutonium and uranium oxides, metals/pellets, and neptunium targets. H Canyon is considered a national asset by the Defense Nuclear Facilities Safety Board.

Importance: *The committee is expected to continue to monitor appropriate utilization of H Area's capability for any new missions that support accelerated clean-up throughout the DOE complex.*

9. Infrastructure and Future Land Use Planning –Strategic & Legacy Management Committee

Issue Description. Planning is critical to any project, and three planning documents are particularly important to achieving SRS missions: the SRS Long-Range Comprehensive Plan, the SRS EM's Program Performance Plan, and the 2006-2015 Ten Year Site Plan. The CAB continues to help DOE and DOE contractors update these plans periodically and render advice on the best ways to accomplish work.

Importance: *The committee is interested in future use planning, including the protection of natural resources, historic structures and artifacts, and how they are managed.*

10. Burial Ground Closure Progress - Facility Disposition & Site Remediation Committee

Issue Description. The Burial Ground program final closure is in progress. Consolidating rad-contaminated soil from three nearby waste units into the burial ground closure expedites closure of the four units by two years and represents \$150 million dollar cost savings.

Importance: *The Committee is interested in the progress of the consolidation units soil removal and placement into the burial ground as another step toward final closure of the burial ground complex.*

11. Federal Facility Agreement (FFA)- Facility Disposition & Site Remediation Committee

Issue Description. With the reconfiguration of Appendix E of the FFA and using area RODs and the Low Risk Plug In / Institutional Control Record of Decision, the site expects to realize significant reduction in document production requirements.

The following FFA activities are scheduled in 2005:

- Hydrofluoric Acid Spill - Public Comment Period on Statement of Basis/Proposed Plan
- A Burning Rubble Pit/Misc Chemicals/Metals Burning Pit - Public Comment Period Statement of Basis/Proposed Plan
- 211-FB - Public Comment Period Statement of Basis/Proposed Plan
- L-Area Southern Groundwater –Corrective Measures Study/Feasibility Study
- Miscellaneous Rubble Pile Removal Action - Public Comment Period on the EE/CA
- M-Area Settling Basin Inactive Process Sewers - Public Comment Period on Statement of Basis/Proposed Plan

Importance: *Given out-year irregularities due to potential budget impacts, the FD& SR Committee will carefully follow the progress of regulator approval of Appendix E as well as the FFA commitment schedule.*

12. Deactivation and Decommissioning – Facility Disposition and Site Remediation Committee

Issue Description. Deactivation and decommissioning (D&D) actions are taken to reduce risk and costs, following shutdown of a facility. A resulting condition of deactivation can be safe storage. Safe storage is defined as a low risk/low cost condition of a facility following deactivation while waiting decommissioning. It is not considered an end state but can be an appropriate long-term condition. Decommissioning includes actions that are taken to place a facility in its final end state. The end state of a facility involves two choices, either demolition or entombment.

Importance: *The FD& SR Committee is very interested in the engineering evaluation and cost analysis as applied to high risk D&D facilities such as the Canyons and Reactor buildings.*

13. Technology Development - Strategic & Legacy Management Committee

(Savannah River National Laboratory and Savannah River Ecology Laboratory)

Technology development is of critical importance to reducing costs and finding new methods for environmental cleanup. With accelerated cleanup a main driver for the DOE Complex, new and different technologies will become increasingly required to meet these demands and reduce costs. Technology development is also increasingly important in those instances where there is no safe or effective current technology available to address contamination and disposition problems as DOE sites move to closure.

Importance: *These technology and environmental resources are of critical importance to reducing costs and finding new methods for accelerating environmental cleanup.*

14. Low Level Waste Disposition – Waste Management Committee

Issue Description. Due to acceleration of waste disposition and D&D Programs, the LLW

disposal volumes have tripled. Solid Waste is working to ensure that methods to properly characterize, transport, store and dispose of this larger volume of waste are safe and technically sound. New, less expensive containers are being utilized. LLW disposal techniques are being optimized as well. Performance Assessment technical analyses are being conducted to ensure that new mission waste, such as the Tritium Extraction Facility (TEF) wastes, and legacy waste such as Reactor Deionizers contaminated with carbon-14, can be disposed within the DOE Order 435.1 Performance Objectives (i.e., meet drinking water standards in the groundwater).

Importance: *LLW management is critical to the development and support of existing and new missions at the site and for continued support of deactivation and decommissioning projects.*

15. Area Completions – Facility Disposition and Site Remediation Committee

Issue Description. The Area Completion concept is part of the Comprehensive Cleanup Plan in that optimizations can be attained within the D&D and Soil and Groundwater Closure Projects (SGCP) activities as an entire area is completed before moving to the next area. This will require effective coordination between both the D&D and SGCP. T-Area is the first area completion. Coordinated work activities in M and D Areas have started. Each completed area will be removed from the Superfund's National Priority List (NPL).

Importance: *The Committee will closely follow the increased activity in area completions while monitoring eventual deletion from the NPL.*

16. Western Sector - Facility Disposition and Site Remediation Committee

Issue Description. Construction of the Western Sector Dynamic Underground Stripping project is underway. Start-up testing is scheduled to begin in January 2005 and operations are to continue through early 2008. The Western Sector deployment represents the largest scale Dynamic Underground Stripping in the DOE complex. An estimated one million pounds of solvents will be removed from the subsurface soils and groundwater.

Importance: *The Committee will monitor the effectiveness of this cleanup deployment, which is the largest of its kind in the DOE complex. This project is an important part of the accelerated cleanup program.*

17. Historic Preservation – Strategic & Legacy Management Committee

Issue Description. DOE, the South Carolina State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (the Council) have developed a Programmatic Agreement (PA) and Cultural Resources Management Plan (CRMP) for the management of Cold War Historic Properties on the Savannah River Site (SRS). While these documents are

final, the Strategic and Legacy Management Committee will continue to monitor the actions directed in the PA and CRMP as well as the intentions. The CAB will have membership on the Historic Preservation Tourism Team. Included in the public stakeholder initiative is the development of a museum or visitor center at or near SRS. Long-term records management would also be considered under this topic.

Importance: *The committee is primarily interested in the protection of artifacts, where the museum will be located and continued monitoring of the Cultural Resources Management Plan.*

18. Miscellaneous- Waste Management Committee

Issue Description. Areas of committee concern are Hanford/Savannah River National Laboratory Treatability Study Waste, the Paper Pellet Program, Consolidated Incineration Facility Closure and surplus metals.

Importance: *The committee wants to monitor progress on these issues in 2005.*