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# Savannah River Site Citizens Advisory Board (CAB)

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*2007  
ANNUAL WORK PLAN*

## **INTRODUCTION**

The Savannah River Site (SRS) Citizens Advisory Board (CAB) is composed of 25 individuals from South Carolina and Georgia. The board members 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 CAB is a Federal Advisory Committee Act board, chartered to provide advice to the U.S. Department of Energy (DOE) Office of Environmental Management. In addition to DOE, the Environmental Protection Agency (EPA) Region IV, the South Carolina Department of Health and Environmental Control (SCDHEC) and the Georgia Department of Natural Resources are represented on the board in an advisory capacity. The CAB uses issues-based committees to focus on various topics. They 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.

The Work Plan covers the current 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.

**ACRONYM LIST**

|        |   |
|--------|---|
| ARP    | Actinide Removal Process                                      |
| BRP    | Burning Rubble Pit  |
| CAB    | Citizens Advisory Board                                       |
| CIF    | Consolidated Incineration Facility                            |
| CRMP   | Cultural Resource Management Plan                             |
| CSSX   | Caustic Side Solvent Extraction                               |
| D&D    | Deactivation & Decommissioning                                |
| DDA    | Deliquification, Dissolution and Adjustment                   |
| DOE    | Department of Energy  |
| DWPF   | Defense Waste Processing Facility                             |
| DUS    | Dynamic Underground Stripping                                 |
| EE/CA  | Engineering Evaluation/Cost Analysis                          |
| EIS    | Environmental Impact Statement                                |
| EM     | Environmental Management                                      |
| EPA    | Environmental Protection Agency                               |
| ES     | End State   |
| FFA    | Federal Facility Agreement                                    |
| FY     | Fiscal Year   |
| KAMS   | K-Area Material Storage                                       |
| LCS    | Low Curie Salt  |
| LLW    | Low Level Waste   |
| MCU    | Modular Caustic Side Solvent Extraction (CSSX) Unit           |
| MOX    | Mixed-Oxide Fuel  |
| NASA   | National Aeronautics and Space Administration                 |
| NM     | Nuclear Materials   |
| NRC    | Nuclear Regulatory Commission                                 |
| NRDC   | Natural Resources Defense Council                             |
| PA     | Programmatic Agreement  |
| PAOU   | P-Area Operable Unit  |
| PMP    | Performance Management Plan                                   |
| RCRA   | Resource Conservation Recovery Act                            |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| SHPO   | SC Historic Preservation Office                               |
| SL&M   | Strategic & Legacy Management                                 |
| SRS    | Savannah River Site   |
| SRNL   | Savannah River National Laboratory                            |
| SWPF   | Salt Waste Processing Facility                                |
| TRU    | Transuranic   |
| WD     | Waste Determination   |
| WM     | Waste Management  |
| WIPP   | Waste Isolation Pilot Plant                                   |
| WIR    | Waste Incidental to Reprocessing                              |
| WOW    | Waste on Wheels   |
| WSRC   | Washington Savannah River Company                             |

## **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 SRS. 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 long-term stewardship into issue deliberations and CAB recommendations.

Topics under consideration for the Strategic and Legacy Management Committee in 2007 include:

- Budget Development
- Gold Metrics
- End State Vision Document
- Land Management Plan
- Biomass Utilization
- Integrated Operable Units
- Historic Preservation

### **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 radioactive liquid waste (LW). This committee’s goal is to reduce the highest risk to the public, workers, and the environment. Two important goals of the committee are to facilitate an effective and mutually cooperative working environment between the DOE/SRS and the respective state regulatory agencies and influence DOE to pursue a more integrated and comprehensive systems approach in its decision making process to include all risks, costs, and safety concerns associated with the various options involved with the decisions affecting SRS.

Topics under consideration for the Waste Management Committee in 2007 include:

- Transuranic (TRU) Waste Disposition
- Low-Level/Mixed Low-Level/Hazardous Waste Disposition
- Liquid Waste including the MCU and ARP
- Performance Assessment Modeling including Point of Compliance Issues
- Waste Determinations and Interactions Between DOE, SCDHEC, EPA, & NRC
- Tank Space Management and Closure
- Saltstone Permit Issues
- Salt Waste Processing Facility
- Defense Waste Processing Facility

### **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.

Topics under consideration for the Facility Disposition and Site Remediation Committee in 2007 include:

- SRS Groundwater Strategy
- Soils and Groundwater Remediation & Technology
- C-Area Burning Rubble Pit
- M-Area Operable Unit
- P-Area Operable Unit
- Deactivation & Decommissioning Updates
- P-Reactor End State Workshop
- F-Area End State & ROD

### **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.

Topics under consideration for the Nuclear Materials Committee in 2007 include:

- EM Vision on Plutonium
- Plutonium Storage & Surveillance
- Disposition of Plutonium Not Suitable for MOX
- Spent Fuel Storage and Disposition
- Canyon Utilization
- K-Area Storage & Operation

## **SRS CAB 2007 PRIORITY LIST**

This Priority List is the result of a survey taken of the CAB members at the January 2007 CAB meeting in Hilton Head Island, South Carolina. The CAB members were given a list of issues identified as topics for consideration by DOE. The CAB members were asked to rank the issues in order of their personal priority, with 1 being their highest priority. The results of the survey were used to establish the list of the top priority items for the 2007 CAB. The highest priority issue for the 2007 CAB involves all aspects of the Liquid Waste Stabilization and Disposition activities at SRS, followed closely by other issues listed below.

### **Liquid Waste**

This includes both the solidification of highly radioactive liquid wastes stored in SRS's tank farms and disposal of liquid low-level waste generated as a by-product of the separations process and tank farm operations. High-level liquid waste is generated at SRS as by-products from the processing of nuclear materials for national defense, research and medical programs. The waste, totaling about 37 million gallons, is currently stored in 49 underground carbon-steel waste tanks grouped into two "tank farms" at SRS. Activities associated with Liquid Waste Stabilization and Disposition are performed in the F and H-Area Tank Farms, the Effluent Treatment Project (ETP), the Defense Waste Processing Facility (DWPF), the Saltstone Facility, the Deliquification, Dissolution, and Adjustment (DDA) process, ARP Facility, MCU, and the SWPF.

The CAB will closely follow progress of the Tank Closure Waste Determination and permitting to close tanks (Tanks 18 and 19) in accordance with the FFA. The FFA commitment dates are currently being revised. The CAB is interested in funding approval and schedule for salt waste processing and the SWPF. This facility will prepare high activity salt waste for disposal at the Saltstone Facility and the Defense Waste Processing Facility (DWPF). The CAB will closely monitor activities regarding the DDA Permit for Saltstone, the critical path schedule, tank space management, and the Performance Assessment and point of compliance issues related to tank closure. The CAB will also continue to follow progress at DWPF to ensure that it continues to vitrify high level liquid waste.

### **Plutonium Storage, Surveillance & Disposition**

The CAB will follow activities related to integrated plutonium disposition including disposition of plutonium not suitable for the Mixed Oxide (MOX) Fuel Program; plutonium storage and surveillance at SRS; and the Environmental Management (EM) vision on plutonium. The CAB will also follow the DOE Nuclear Materials Disposition and Consolidation Coordination Committee's activities as it relates to SRS. The CAB wants to ensure adequate and sustained funding for plutonium disposition and ensure the safe storage of plutonium at the K Area Material Storage (KAMS) facility.

### **Budget Development/Gold Metric**

The CAB will follow the SRS funding process and assure adequate funding to perform work that is sequenced to reduce risk posed to public health, worker safety, and the environment, all of which are of utmost interest to SRS stakeholders. For stakeholder opinions to be of any consequence, early involvement in the budget formulation process is required, and this requires that the CAB closely monitor progress against DOE-approved work schedules, key performance indicators, and annual financial reports.

### **TRU Waste Disposition**

The CAB will continue to monitor Solid Waste Program activities including the Transuranic (TRU) Waste Program. Shipments of 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.

### **Canyon Utilization**

The CAB plans to continue to monitor appropriate utilization of H Area's capability for any new missions that support cleanup. The CAB wants to ensure adequate and sustained funding for H Canyon. 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 highly enriched. H Area can also handle plutonium and uranium oxides, metals/pellets, and neptunium targets. The CAB is expected to continue to monitor appropriate utilization of H Area's capability for any new missions that support accelerated cleanup throughout the DOE complex.