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**Savannah River Site**  
Citizens Advisory Board (CAB)

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**2011**  
***ANNUAL WORK PLAN***

 2/28/11

Doug Hintze  
Signature Co-DDFO      Date

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## INTRODUCTION

We, the 25 members of the Savannah River Site (SRS) Citizens Advisory Board (CAB), are pleased with having developed this 2011 Work Plan to help us keep focused during the year as we provide informed and timely recommendations at the request of the U.S. Department of Energy (DOE), through the Savannah River Operations Office (SR). We are looking forward to a busy year of receiving information and making recommendations.

Our recommendations should fall in the areas of environmental restoration, waste management, and related activities. Each January, DOE-SR presents a list of planned and ongoing activities at SRS that assists us in identifying issues and topics that are of particular interest to the CAB and to DOE. From this list, we developed the 2011 Work Plan as a tool to help us target appropriate topics for each of our four issues-based committees:

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

The topics presented by DOE-SR at the January 2011 Full Board meeting are to be considered DOE's request for public advice during the current calendar year. Committee chairs will work with the CAB's Technical Advisor and strive to keep the number and intensity of topics selected at a manageable level with a goal of completing all topics in the Work Plan within the calendar year. It should be recognized that the amount of time and resources available to conduct CAB business are limited. The CAB activities for 2011 should be structured to focus only on the topics identified in the 2011 Work Plan.

It is understood, however, that other emerging issues and topics may present themselves after the Work Plan has been approved. In such cases, the CAB Chair will review and approve any committee chairperson's requests for additions to the Work Plan. If approved, the CAB Chair will submit a request to the CAB Support Team to be presented to the Deputy Designated Federal Officer for his/her approval. This request will be evaluated and a response given by DOE in a timely manner. If approved, the additional topic(s) will be added to the Work Plan. Note that until such approval is received, the CAB will not pursue consideration of or engagement in, activities related to the new issue or topic.

We also understand that occasionally requested presentations may not be appropriate, as they do not fall within the scope of the Environmental Management Site-Specific Advisory Board (SSAB) Charter, or selected information may be at a pre-decisional status or security prohibitive.

When the interest or timing is appropriate, our CAB committee chairpersons will contact the CAB's Support Team by email ([srscitizensadvisoryboard@srs.gov](mailto:srscitizensadvisoryboard@srs.gov)) and provide a full and clear explanation to include (a) what information or topic is requested, (b) approximately when the committee desires to hear about it, and (c) a summary of thoughts generated by CAB members on the topic. The Support Team will secure meeting locations and presenters for all Work Plan topics, based upon availability.

We, as members of the SRS CAB, will make a conscious effort to attend all meetings of the committee we joined, to support other CAB committees, and to log on to any CAB Online Meetings, when possible, to keep current with Work Plan topic developments, and assist in the completion of Work Plan topics.

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### ACRONYM LIST

ARRA	American Recovery and Reinvestment Act	NNSA	National Nuclear Security Administration
ARP	Actinide Removal Process	NEPA	National Environmental Policy Act
BRP	Burning Rubble Pit	NM	Nuclear Materials
CAB	Citizens Advisory Board	NRC	Nuclear Regulatory Commission
CMP	Chemicals, Metals, and Pesticides	NRDC	Natural Resources Defense Council
CSSC	Container Surveillance & Storage Capability Project	PA	Programmatic Agreement
CSSX	Caustic Side Solvent Extraction	PAOU	P-Area Operable Unit
D&D	Deactivation & Decommissioning	PMP	Performance Management Plan
DDA	Deliquification, Dissolution and Adjustment	Pu	Plutonium
DOE	Department of Energy	RCRA	Resource Conservation Recovery Act
DWPF	Defense Waste Processing Facility	SCDHEC	South Carolina Department of Health and Environmental Control
DUS	Dynamic Underground Stripping	SHPO	SC Historic Preservation Office
EIS	Environmental Impact Statement	SL&M	Strategic & Legacy Management
EM	Environmental Management	SRNL	Savannah River National Laboratory
EPA	Environmental Protection Agency	SRNS	Savannah River Nuclear Solutions
ES	End State	SRR	Savannah River Remediation
FD&SR	Facilities Disposition and Site Remediation	SRS	Savannah River Site
FFA	Federal Facility Agreement	SRNL	Savannah River National Laboratory
FY	Fiscal Year	SSAB	Site-Specific Advisory Board
HB (Line)	Process line above H-Canyon	S&LM	Strategic and Legacy Management
HEU	Highly Enriched Uranium	SWPF	Salt Waste Processing Facility
HLW	High Level Waste	TRU	Transuranic Waste
HWCTR	Heavy Water Component Test Reactor	TYSP	Ten-Year Site Plan
IPL	Integrated Priority List	USFS-SR	United States Forest Service
LCS	Low Curie Salt	WD	Waste Determination
LLW	Low Level Waste	WM	Waste Management
LW	Liquid Waste	WIPP	Waste Isolation Pilot Plant
MCU	Modular Caustic Side Solvent Extraction Unit	WIR	Waste Incidental to Reprocessing
MLLW	Mixed Low Level Waste	WOW	Waste on Wheels
MOX	Mixed-Oxide Fuel		

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## Issues-Based Committee Descriptions for the 2011 Work Plan

### *Facilities Disposition and Site Remediation Committee*

This committee addresses the remediation of contaminated areas at SRS and addresses the various types of groundwater and surface water contamination. The committee deals with issues related to the Federal Facility Agreement (FFA), risk management/risk assessment, 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 (FD&SR) Committee in 2011 include:

- I. Facility Disposition
  1. HWCTR (Heavy Water Component Test Reactor)
  2. R-Area Completion Update
  3. P-Area Completion Update
- II. Site Remediation
  1. Updates
    - i. FFA Appendix E
    - ii. Integrator Operable Units Program
    - iii. Groundwater Remediation Progress
    - iv. Community Involvement Plan
  2. Operable Unit Project Updates
    - i. C-, D-Areas Operable Units
- III. American Recovery and Reinvestment Act (ARRA)
  1. Recovery Act Funding and Project Status
- IV. Environmental Monitoring Program
  1. Program
  2. Annual Report
- V. Chemicals, Metals, Pesticides (CMP) Pits Electrical Resistance Heating System Remediation Final Report
- VI. P-Area Ash Basins Project Progress
- VII. Biomass Plant Background/Update
- VIII. C-Area Historical Issues/Update
- IX. Federal/State Regulatory Oversight of Cleanup Activities

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## *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 2011 include:

- I. Plutonium Storage and Consolidation
  1. Plutonium Consolidation Activities\*
  2. Plutonium Storage and Surveillance Program
- II. K-Area Update
  1. Feasibility Studies Relating to Plutonium Disposition (Disposal in WIPP)
  2. DWPF-optimization of the amount of material loaded into each canister
  3. Facilities updates/upgrades
  4. Heavy Water Disposition
- III. Plutonium Disposition Program
  1. Future Pu Plan-Recommendations 263 & 271
  2. Optimization Studies for Disposition of Plutonium (Variations in Pu loading of canisters)\*
  3. WIPP Update
- IV. Enriched Uranium Disposition Program
  1. HEU Processing in H-Canyon Complex
  2. Further HEU Receipts\*
- V. Used Nuclear Fuel Storage and Disposition Program
  1. Storage and Receipt of Used Nuclear Fuel
  2. Used Fuel Inventory and Planned Receipts (Foreign and Domestic)\*
  3. Used Fuel Processing Plans
  4. Used Fuel Exchange Program with Idaho
  5. Used Fuel Facility Upgrades
- VI. H-Canyon Complex (Includes HB-Line Processing Activities/Capabilities/Schedules)
  1. H-Canyon Complex Processing Schedules/Capabilities
  2. H-Canyon Complex Infrastructure Upgrades
  3. H-Canyon Complex Waste Minimization Efforts
  4. H-Canyon Complex Operations/Safety Analyses
- VII. Other Nuclear Materials Activities
  1. Disposition of Depleted Uranium Oxide (DUO)
  2. Receipt and Disposition of Any Additional Nuclear Materials\*
  3. National Nuclear Security Administration (NNSA) Update, Small Modular Reactor

\*It should be noted that for those NNSA related topics, input, advice and recommendations from the CAB are not to be performed. These NNSA related topics/activities are for "Information Only."

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## *Strategic and Legacy Management Committee*

This committee is involved in strategic issues relevant to the future of the SRS. This includes long-term policy, planning and other cross-cutting issues related to other CAB committees. 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. The Committee encourages other CAB committees to integrate long-term stewardship into issue deliberations and CAB recommendations. Topics under consideration for the Strategic and Legacy Management (S&LM) Committee in 2011 include:

- I. Planning
  - 1. Strategic Planning
    - i. Restructuring and Adaptive Reuse of Buildings and Resources
    - ii. Nuclear Initiatives
  - 2. Workforce Restructuring
- II. Budget Formulation/Integrated Priority List (IPL)
- III. Performance Measures
- IV. Land Management and Use
  - 1. Military Operations
- V. Environmental Monitoring
  - 1. Natural Resources Management Plan Historic Preservation

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## *Waste Management Committee*

This committee reviews 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). Their goal is to see a reduction in high risk to the public, workers, and the environment. Two other 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 waste management and disposition. Topics under consideration for the Waste Management (WM) Committee in 2011 include:

### **Solid Waste**

- I. Transuranic (TRU) Waste Program Update
  1. TRU Drum Shipments
  2. TRU Waste Removal from Storage PAD 1
  3. Large Box Certification
- II. Low-Level/Mixed Low-Level/Hazardous Waste Disposition
  1. Greater than Class C Waste (approved for addition to work plan by Hintze; March 3, 2011)
- III. Other Solid Waste Repositories, e.g. Clive etc (Commercial)

### **Liquid Waste**

- I. SWPF Support Modifications
    1. Tank 50 Return to Service (RTS) Projects
    2. Tank Preparation and Upgrade Projects to meet SWPF needs
    3. Other Tank Farm Infrastructure Modifications
  - II. Tank 13 Infrastructure Upgrades
  - III. Tank Closure
    1. Tanks 18 and 19 Closure Module and Schedule for Final Approval
    2. Tanks 5 and 6 Isolation and Closure
    3. H Area Tank Farm (HTF) Performance Assessment Regulatory Approvals-SCDHEC, EPA, and NRC
    4. F Area Tank Farm (HTF) Performance Assessment Regulatory Approvals-SCDHEC, EPA, and NRC
    5. Waste Determinations (3116)
    6. Tank Annulus Cleaning
    7. Tank Space Management (Fill Levels)
    8. Enhanced Chemical Cleaning-Design and Testing of Cleaning Units
    9. Chemical Addition Infrastructure-Automated Transfer of Chemicals to Tanks
    10. Plans for Accelerated Tank Closures and Schedule Integration-Gear Chart
  - IV. Defense Waste Processing Facility Operations (DWPF)
    1. Update on Process Improvements to Achieve Higher Production Rates
    2. Impacts of Accelerated use/operations/Budget
      - i. Upgrades-Melter Bubbler Performance
      - ii. Long-Term Storage Needs-Glass Waste Storage Buildings
    3. Excess Plutonium Disposition
  - V. Salt Waste Processing
    1. Facilities
      - i. SWPF Project progress and schedule
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- ii. ARP/MCU Operations
    - iii. Saltstone Processing and Disposal Facility
  - 2. Supplemental Salt Processing Initiatives
    - i. Actinide Removal Process (ARP) /Modular Caustic Side Solvent Extraction Unit (MCU)-Improved Solvents
    - ii. Rotary Microfiltration (RMF) and Small Column Ion Exchange (SCIX)
    - iii. Saltstone Enhancements
- VI. Miscellaneous
- 1. NM and Other Waste Stream Generated by H-Canyon Operations
  - 2. System Planning Updates/Critical Path Updates
  - 3. SRNL Support of the Liquid Waste Program
  - 4. Updates on the Blue Ribbon Commission's Studies and Recommendations