Savannah River Site
Citizens Advisory Board Meeting

SRS Recovery Act
Footprint Reduction Project Update

Presentation By
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Recovery Act Program Manager
Department of Energy
Savannah River Operations Office

July 28, 2009
CAB Areas of Interest re: Recovery Act

- Progress/accomplishments
- Jobs creation and retention, including skills types and training
- Expenditures
- Alignment with ongoing/future missions

- Project Oversight
- Safety
- Regulatory
- Communications
SRS Recovery Act Footprint Reduction

• Accelerate the completion of existing environmental protection and site cleanup goals by many years, reducing the EM footprint at the SRS approximately 40% by September 2011, eliminating environmental threats and reducing life-cycle costs.
• Fulfills Government’s responsibility to address nuclear weapons waste; allows earlier completion of legal compliance agreement milestones; and enables reuse of DOE resources, including land and infrastructure, for other energy missions or reuse.
• Purpose of these funds is to create near-term environmental cleanup jobs with an eye toward lasting economic benefits aligned to Administration goals.
• Clear work scope, cost estimates, and schedules must be fully defined and supported.
SRS Footprint Reduction

- Accelerate Area Completion in P, R, M, and D Areas, including decommissioning of P- and R-Reactors
- Eliminate 90% of the Pu 238 source term in 235-F
- Ship / stage / make ready 4500 m3 legacy TRU Waste for offsite disposal
- Ensure the reduction of environmental risk with large return on investment
- Achieve ~40% reduction of the site footprint

- Reduce operational footprint by 40 percent by 2011
- Save $1 billion in lifecycle costs
- Create on-site jobs with the Recovery Act

- Metallurgical Building risk reduction
- F Area Outside Facilities (F/A Line) deactivation and decommissioning
- Facilities deactivation and decommissioning
- RemEDIATE 4 waste units

- Facilities deactivation and decommissioning
- Waste storage area closure

- Completed 2006

2009

With $535 million per year from 2009-2011
- Have all transuranic waste shipped or ready to be shipped
- 2 low-level waste trenches closure
- Facilities deactivation and decommissioning
- Waste storage area closure
- Accelerate characterization

Completed
Completion by 2011
Accelerated
Infrastructure Consolidated
SRS Recovery Act Project Structure

Savannah River Site

Key:
- EM PBS
- ARRA-Funded Sub-PBSs
- EM Operations
- Capital Asset Project
- Other EM PBSs (Base-funded)
- SR-0013 Solid Waste Stabilization and Disposition

SR-0030 Area Completion
- SR-0030.R1 D&D P & R Area Completion
  - SR-0030.R1.1 P Area Completion
  - SR-0030.R1.2 P Area Completion
  - SR-0030.R1.3 P&R Area Facility Cleanout
    - Close M Area
    - Remediate 19 M Area waste units
    - Close D Area
    - Remediate 11 D Area waste units
    - Deactivate 31 excess facilities for Army reuse

- SR-0030.R2 D&D M & D Area Completion
  - SR-0030.R2.1 M Area Completion
  - SR-0030.R2.2 D Area Completion
  - SR-0030.R2.3 M&D Area Facility Cleanout

- SR-0030.R3 Other Area Completions
  - SR-0030.R3.1 A Area Completion
  - SR-0030.R3.2 C, F & H Area Completion
  - SR-0030.R3.3 G Area Completion
  - SR-0030.R3.4 K & N Area Completion
  - SR-0030.R3.5 Operations and Field Support
    - Post-ROD S&M
    - RCRA permit reqts
    - Remedial system ops
  - SR-0030.R3.6 Relocation of EOC
    - D&D 703A and ancillary facilities
    - Remediate 4 waste units (31 acres)
    - Remove 90% Pu-238 Bldg 235F
    - D&D FA line, CIF
    - Install F/H Groundwater treatment system
    - Remediate Gunsites 012, 218, CMP Pits
    - D&D HWCTR

- SR-0030.R3.7 Consolidation of SATA and ATTA
  - D&D K-Area Powerhouse, Cooling Tower, Bldgs 645-N, 690-N, 728-N

- SR-0030.R3.8 Other Area Facility Cleanout
  - Post-ROD S&M
  - RCRA permit reqts
  - Remedial system ops

SR-0013 Area Completion
- SR-0013.R1 CH and RH TRU Disposition
  - SR-0013.R1.1 CH and RH TRU Disposition
    - Ship/prepare to ship 4500m3 legacy TRU
  - SR-0013.R1.2 Solid Waste Disposition
    - Disposition hazardous waste, LLW, MLLW
  - SR-0013.R1.3 Depleted Uranium Oxide Disposition
    - Disposition off-site 16,000 drums
  - SR-0013.R1.4 Waste Storage Consolidation
  - SR-0013.R1.5 Trench Expansion

SR-0013.R1.3 Depleted Uranium Oxide Disposition
  - Disposition off-site 16,000 drums

SR-0013.R1.4 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R1.5 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R2 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R3 Depleted Uranium Oxide Disposition
  - Disposition off-site 16,000 drums

SR-0013.R4 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R5 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R6 Depleted Uranium Oxide Disposition

SR-0013.R7 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R8 Waste Storage Consolidation

SR-0013.R9 Trench Expansion

SR-0013.R10 Depleted Uranium Oxide Disposition

SR-0013.R11 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R12 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R13 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R14 Depleted Uranium Oxide Disposition

SR-0013.R15 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R16 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R17 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R18 Depleted Uranium Oxide Disposition

SR-0013.R19 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R20 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R21 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R22 Depleted Uranium Oxide Disposition

SR-0013.R23 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R24 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R25 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R26 Depleted Uranium Oxide Disposition

SR-0013.R27 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R28 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R29 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R30 Depleted Uranium Oxide Disposition

SR-0013.R31 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R32 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R33 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R34 Depleted Uranium Oxide Disposition

SR-0013.R35 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R36 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R37 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R38 Depleted Uranium Oxide Disposition

SR-0013.R39 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R40 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R41 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R42 Depleted Uranium Oxide Disposition

SR-0013.R43 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R44 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R45 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R46 Depleted Uranium Oxide Disposition

SR-0013.R47 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R48 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R49 Trench Expansion
  - Deleted; trench not needed; geotechnical work only

SR-0013.R50 Depleted Uranium Oxide Disposition

SR-0013.R51 Solid Waste Disposition
  - Disposition hazardous waste, LLW, MLLW

SR-0013.R52 Waste Storage Consolidation
  - Consolidate waste operations into E Area

SR-0013.R53 Trench Expansion
  - Deleted; trench not needed; geotechnical work only
Major Accomplishments to Date

Transuranic Waste

• Completed 1,000th TRU waste shipment to WIPP
• Made 15th RH shipment to WIPP
• Made 1st ever controlled RH TRU Waste shipment to WIPP
• First 50 SLB2 containers thru RTR Fastscan
• Started TRU Pad 1 Phase 1A retrieval

Area Completion

• Initiated deactivation of Heavy Water Components Test Reactor (HWCTR).
• Completed installation of monitoring network for enhanced bio-remediation for solvent contaminated groundwater in P Area.
• Issued subcontract for clearing & grubbing of P&R Area Ash Basins.
• Successful detritiation pilot test in D area.
• Successful proof of concept pilot test for grouting of 2 sumps in R area disassembly basin.
Retrieval of Culverts from TRU Pad 1
Major Accomplishments to Date

Job Fairs

- USC – Salkehatchie Job Fair – Allendale, SC, June 11
- Barnwell Town Hall Meeting and Job Fair – Barnwell, SC, June 17
- Allendale Town Hall Meeting and Job Fair – Allendale, SC, June 24
- Aiken Town Hall Meeting and Job Fair, Aiken, SC, July 7
- Augusta Town Hall Meeting and Job Fair, Augusta, GA, July 20

Hiring (as of July 10)

- Jobs Retained: 798
- Jobs Created: 612
- Applications received: ~10,300
- Retirees hired: 63
Major Accomplishments to Date

- EM – More than 44,000 job applicants (1/4 of these at SRS)
- EM – More than 26 job fairs for employment opportunities across nation (1/6 of these at SRS)
- EM -- As of July 10, more than 4,000 jobs saved and created in 12 states through use of stimulus funding (over 1/3 of these at SRS)

### State

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Number of Full-Time Equivalents (FTEs)
## Major Accomplishments to Date

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As of July 10, 2009:

- SRS received **27%** of EM’s total Recovery Act funding
- SRS obligated **33%** of all EM Recovery Act funding obligated to contracts so far
- SRS spent **38%** of all EM Recovery Act funding spent so far
Contracting Status

• SRNS Management and Operating Contract
  – Contract modified April 8, 2009
  – $1.2 billion obligated
  – Cost authority currently held to 30% ($347M) pending acceptance of the performance baseline

• Small business goals and status for subcontracting (includes both Base M&O and Recovery Act-funded activities):
  – Small Business: Goal – 50%; Cum. Status – 56.4%
  – Woman-owned Small Business: Goal – 11.4%; Cum. Status – 24.2%
  – HUB-Zone Small Business: Goal – 3.1%; Cum. Status – 2.9%
  – Service-Disabled Veteran-Owned Small Business: Goal – 1.3%; Cum. Status – 1.3%

• Percentage of June small business awarded, by category, resulting from Recovery Act funding:
  – Small Business: 66.3% (FYTD Cum. 71.9%)
  – Small Disadvantaged Business: 35.5% (FYTD Cum. 38.6%)
  – Woman-owned Small Business: 40.7% (FYTD Cum. 45.6%)
  – HUB-Zone Small Business: 4.2% (FYTD Cum. 4.6%)
  – Service-Disabled Veteran-Owned Small Business: 1.1% (FYTD Cum. 0.7%)
Project Oversight

• Safety is and will continue to be our priority in the execution of work performed under the Recovery Act
  – SRNS is hiring experienced, full-time Conduct of Operations mentors

• Interaction with our regulators will continue, as always, to ensure compliance as we proceed
  – Both agencies have representatives on site regularly
ConOps/Safety Mentoring Program

• Purpose
  – Defense in depth to ensure work is performed safely due to increased number of workers with minimal site experience and various safety cultures
  – Increased work load over a relatively short duration

• Duties
  – Full time Conduct of Operations Mentors assigned to major work activities in TRU-repack, Solid Waste, and D&D (~20)
  – Integrate with work crew and ensure an appropriate level of rigor is implemented throughout all aspects of work activities
  – Will not take the place of foreman, lead or others in chain of command

• Mentor Qualifications
  – Several years of experience in area of responsibility
  – Backgrounds in commercial and/or navy nuclear operations, DOE Complex; interpersonal skills

• Benefits
  – Higher level of safety performance, identification of emerging trends, sharing of lessons learned, improved safety culture in workforce
Project Oversight

- Good Project oversight by HQ, DOE-SR, and SRNS required to ensure funds spent appropriately and work accomplished in a timely manner
  - Projects will take all steps necessary to avoid delays and cost overruns
  - Every step will be taken to prevent instances of fraud, waste, error, and abuse
- Numerous reviews have been or will be conducted
  - EM-HQ conducted an initial review April 20 – 24
  - Independent Review and Validation of cost estimates: July 13 – 17
  - Independent Project Review: July 27 – 31
  - External Independent Review: August 10 – 14
  - GAO Audit: SRS visit week of August 3
  - IG Audit: Phase 1 complete, report pending
Regulatory Agency Involvement

- Air, Water, and RCRA Permit planning / processing
- FFA & STP
- Process modifications
  - Accelerated review schedules
  - Co-location
- End State planning
Recovery Act NEPA Review

- DOE submits a quarterly report to Council on Environmental Quality, as required by Section 1609 of Recovery Act.
- D&D and remediation projects are CERCLA-driven, and require no NEPA review, but
  - NEPA values (e.g., socioeconomic impacts, human health impacts) are incorporated in CERCLA documentation
  - Environmental Evaluation Checklists are prepared for each project to confirm they are conducted under CERCLA and ensure that pre-requisite actions (e.g., facility deactivation) receive appropriate NEPA review
Recovery Act NEPA Review

• Waste disposition projects are addressed in existing NEPA reviews
  – SRS Waste Management EIS (DOE/EIS-0217)
  – Waste Isolation Pilot Plant Final Supplemental EIS DOE/EIS-0026-S2)
  – Environmental Evaluation Checklists will be prepared for each project to confirm they are addressed in existing NEPA documents and ensure that related actions receive the appropriate NEPA review
• Projects not clearly addressed in existing NEPA reviews will receive appropriate review
  – So far, all projects have been determined to be addressed or have been categorically excluded from further NEPA review
Actions Addressed in Existing NEPA Reviews

- ARRA-P-2009-033, Install and Operate Mobile Batch Plant, Engineering Evaluation/Cost Analysis
- ARRA-F-2009-014, Disposition Depleted Uranium Trioxide, DOE/EA-1308, February 2001, 05/22/09
- ARRA-E-2009-017, Retrieve Waste Containers from TRU Pad 1, DOE/EIS-0217, July 1995, 05/12/09
- ARRA-F-2009-014, Disposition Depleted Uranium Trioxide, DOE/EA-1308, February 2001, 05/22/09
Actions Categorically Excluded

• ARRA-R-2009-003, Deactivation of the 105-R Reactor Building, B 1.28, 03/27/09
• ARRA-R-2009-001, R-Area Cask Car Railroad Tracks, B 6.1, 03/27/09
• ARRA-N-2009-019, Reactor ISD Grout Sample Preparation and Testing, B3.6, 05/20/09
• ARRA-P-2009-034, Construct Rail Spur to Concrete Batch Plant, P-Area, B1.13, 07/08/09
• ARRA-M-2009-027, M-Area Chemical Oxidation (MACO) - Installation of Southern Sector Coreholes, Monitoring Wells for tech demo of in situ persulfate oxidation, B3.1, 06/09/09
• ARRA-C-2009-002, C-Area Cask Car Railroad Tracks, B 6.1, 03/27/09
• ARRA-H-2009-021, H-Area HWMF Base and Silver Chloride Injection, B6.1, 05/28/09
• ARRA-F-2009-022, F-Area HWMF Silver Chloride Injection Wells, B6.2, 06/15/09
• ARRA-C-2009-031, C-Area Tritium Anomaly “CPT” Cone Penetrometer Technology, B3.1, 06/04/09
• ARRA-F-2009-032, F-Canyon Complex Deactivation, B1.27, B1.28, 06/23/09
• ARRA-A-2009-023, Relocation of Services to Support 784-A D&D, B1.28, 07/08/09
• ARRA-U-2009-035, Groundwater Monitoring Well Installation at HWCTR, B3.1, 06/23/09
• ARRA-G-2009-038, Automated Fuel Management System Replacement, B2.2, 06/29/09
• ARRA-B-2009-006, Install trailers and refurbish parking lot, B-Area, B1.15, 04/06/09
• ARRA-E-2009-013, Locating “Mobile Mini” Office Buildings, B1.15, 05/05/09
• ARRA-E-2009-015, Install 18 New Office Trailers in the E-Area Rock Yard, B1.15, 05/11/09
Communications

- [www.recovery.srs.gov](http://www.recovery.srs.gov), [www.twitter.com/SRSNews](http://www.twitter.com/SRSNews)
  - Employment opportunities information
  - “Doing Business” with SRS Recovery Act Project
  - Newsroom with information for the media
  - Ability to email us questions / comments
  - Fact sheets on project

  **Website will be constantly evolving throughout the project**

- **Regularly scheduled meetings**
  - Regulators (SCDHEC, EPA, etc…)
  - CAB briefings
  - Town Hall meetings
  - Economic Development Organizations
  - Editorial board meetings
  - Business leaders in the CSRA
  - Government