

Savannah River Recovery Act Program

Office of Environmental Management
Savannah River Operations Office
Savannah River Site
Aiken, South Carolina



U.S. DEPARTMENT OF
ENERGY

South Carolina Governor's Nuclear Advisory Council

Update on Savannah River Recovery Act Program

March 25, 2010

Presented by

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Savannah River Recovery Act Program**



Achieved Goal of 3,000

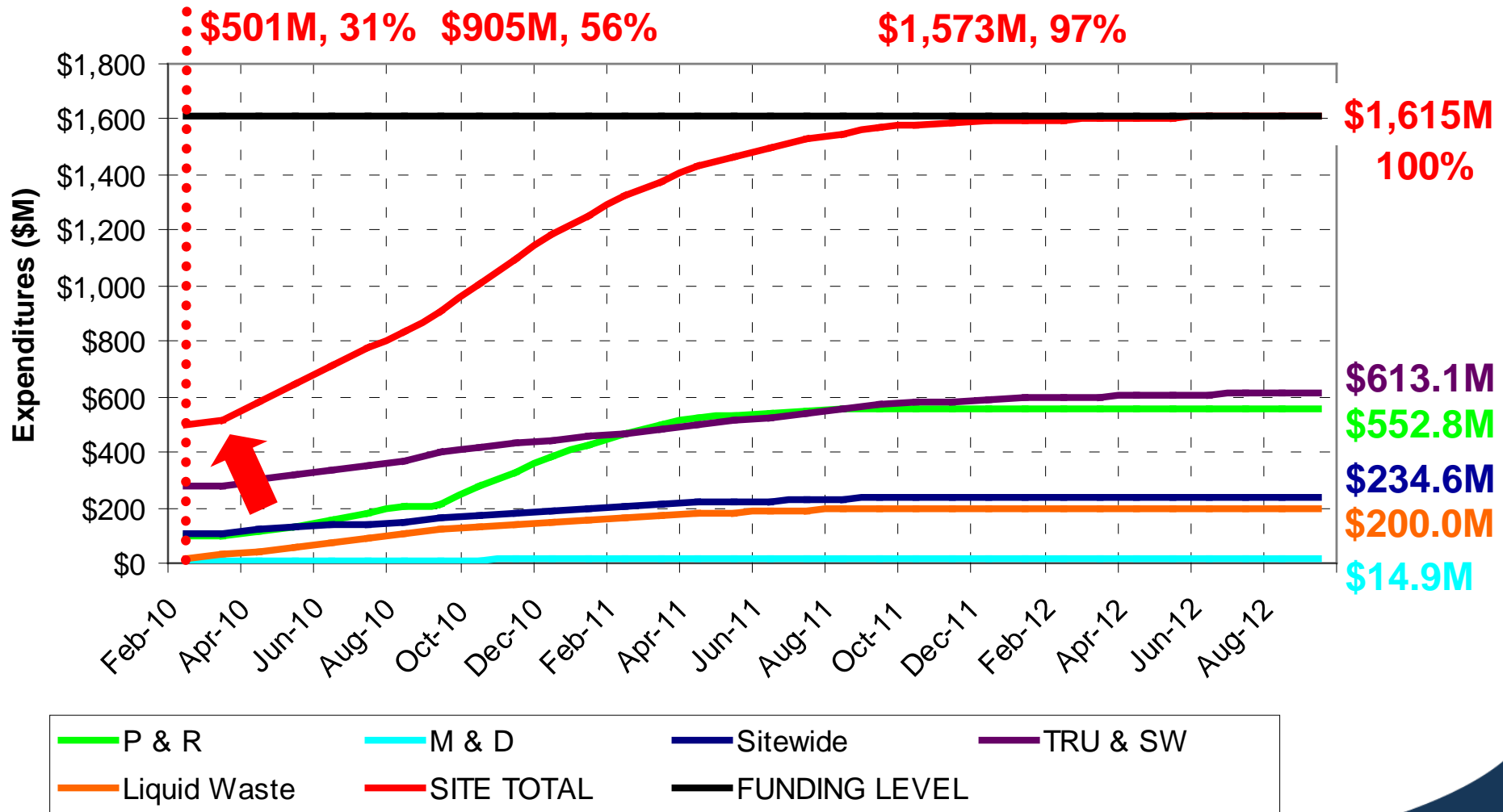


	Saved	Created	Subtotal
SRR	495	475	970
SRNS	798	1,414	2,212
Cavanagh	0	4	4
SREL	22	1	23
DOE Staff Augs	0	16	16

Grand Total = 3,225
(as of March 12, 2010)



Spend Profile



- ❖ **Savannah River Nuclear Solutions, LLC (SRNS)**
 - **SRNS subcontracts awarded = \$271,210,801**
 - **\$186,630,440 to small businesses †**
 - **\$108,150,219 to local businesses ‡**

- ❖ **Savannah River Remediation (SRR)**
 - **SRR subcontracts awarded = \$16,404,607**
 - **\$9,238,468 to small businesses †**
 - **\$11,959,832 to local businesses ‡**

† Includes local and non-local businesses

‡ Includes small and large businesses

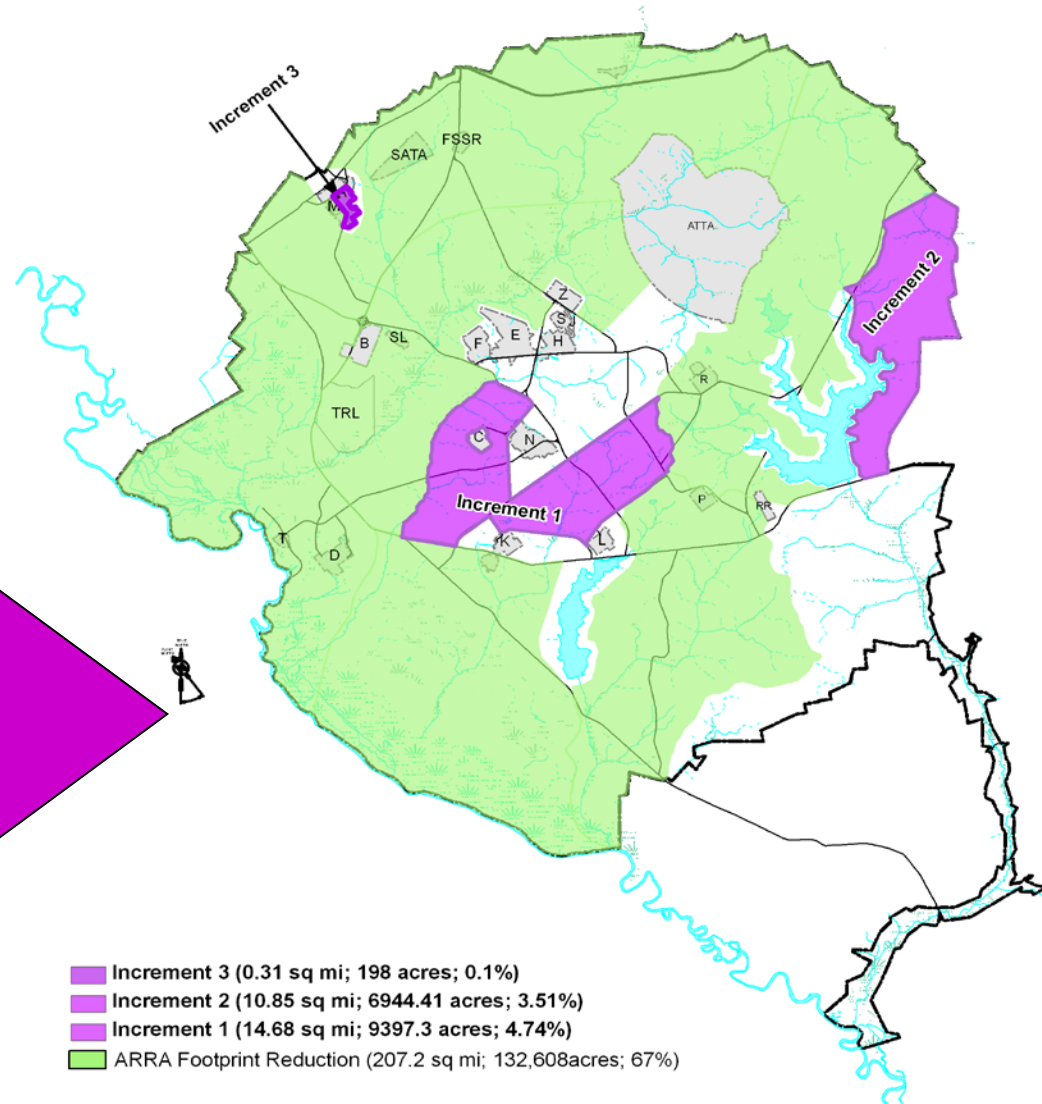


Mission Objective: Reduce Operational Footprint

Initial Target
45%

Baseline Scope
67%

New Target
75%



Mission Objective: Disposition Legacy TRU

Baseline	Path Forward
4,200 cubic meters of legacy waste disposed by 6/28/2012	4,200 cubic meters of legacy waste disposed by 12/30/2012
800 cubic meters of legacy waste in 6.6-m ³ boxes (SLB) by 9/30/2012	800 cubic meters of legacy waste in 1.8-m ³ boxes (SWB) by 9/30/2012
Development of technical approach to disposition 200 cubic meters of very difficult legacy waste	200 cubic meters of very difficult legacy waste dispositioned by 12/31/2012



Mission Objective: Accelerate, Optimize, Integrate Tank Closure and LW Operations



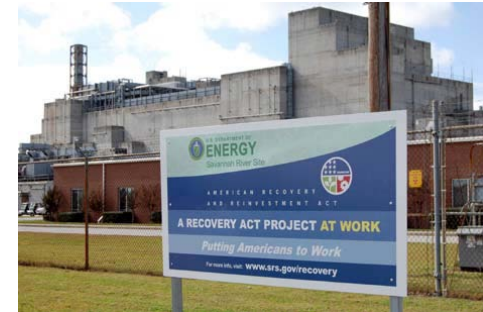
- ❖ **Tank Closure:** Conduct various phases of tank closure to include waste characterization, bulk waste and heel removal, and annulus cleaning.



- ❖ **Waste Treatment:** Design and install components to enhance Defense Waste Processing Facility and Saltstone operations

- ❖ **Salt Disposition Integration:** Install salt processing infrastructure to support Salt Waste Processing Facility

- ❖ **Facility Operations:** Design and install modifications to support enhanced salt and sludge waste removal



Mission Objective: *In Situ* Reactor Decommissioning



- ❖ Final end state
- ❖ Precedent-setting
- ❖ Demonstrate in place closure for other structural monoliths

SR-0013.R1.1, Solid Waste Disposition

- ❖ **Funding: \$324.5M**
- ❖ **Accomplishments**
 - **Submitted 710-B/N Area Closure Plan to regulators**
 - **Completed setup in F Area to load DUO drums into sealands for shipment to ORNL**
 - **Continuing with solid waste management operations in E Area**



SR-0013.R1.2, Accelerated TRU Waste Disposition

- ❖ **Funding: \$303.6M**
- ❖ **Accomplishments**
 - **Completed RTR Fastscan of 49 drums and 6 SWBs**
 - **Completed remediation of 19 drums at F Canyon**
 - **Overpacked 110 Pad 1 Drums**
 - **Initiated ISOCS assay of SLB-2 containers from H-Canyon repackaging**
 - **Initiated remediation in H Canyon Warm Shop producing 6 compliant SWBs**
 - **Processed 54 TRU Pad 1 Drums through Vent and Purge**
 - **Completed 17 shipments to WIPP**



SR-0014C.R1.1, Liquid Waste System Recapitalization

- ❖ **Funding: \$200.0M**
- ❖ **Accomplishments – Waste Removal and Tank Closure**
 - **Completed first RA project moving a pump from Tank 6 to Tank 5**
 - **Completed Tank 5 Ventilation Refurbishment**
 - **Installed Tank 13 steam line modifications**
 - **Completed D&R of Riser 2A and 4**
 - **Awarded contract for ECC Real Waste Test Equipment**
- ❖ **Accomplishments – Facility Operations**
 - **Completed preliminary design for Tank 50 shielding**
- ❖ **Accomplishments – Waste Treatment**
 - **Completed final designs for all 4 DWPF Bubblers to increase melter throughput**



SR-0030.R1.1, P-Area & R-Area Completion GPP & Operations

- ❖ Funding: \$165.5M
- ❖ P Area Accomplishments
 - Achieved mechanical completion of P Cask Car Railroad Tracks Waste Unit
- ❖ R Area Accomplishments
 - Achieved mechanical completion of R Cask Car Rail Road Tracks Waste Unit



SR-0030.R1.2, P-Reactor Decommissioning Project

- ❖ **Funding: \$142.2M**
- ❖ **Accomplishments**
 - **Completed core-drilling in the monitor-pin room roof to accommodate exhaust stacks for evaporators 7-10**
 - **Released contractor (Bierlein) to assemble main crane for Gantry Crane removal**



SR-0030.R1.3, P-Area Ash Basin Remedial Action Project

- ❖ **Funding: \$30.0M**
- ❖ **Accomplishments**
 - **Started removing 35-acres of vegetation from the P Ash Basin and 007 Outfall**
 - **Completed hand-auger sampling at 37 locations to determine ash thickness**



SR-0030.R1.4, R-Reactor Decommissioning Project

- ❖ Funding: \$149.3M
- ❖ Accomplishments
 - Placed 3,674 cubic yards of grout in the Disassembly Basin
 - Started removing non-embedded metal from the exterior of 105-R



SR-0030.R1.5, R-Area Ash Basin Remedial Action Project

- ❖ Funding: \$11.8M
- ❖ Accomplishments
 - Completed stockpiling more than 62,000 cubic yards of soil (fill material) from an on-site borrow pit



Excavating fill material

SR-0030.R2.1, M-Area & D-Area Completion GPP & Operations

- ❖ Funding: \$17.3M
- ❖ D Area Accomplishments
 - Started removing PCB coating from the 420-D slab
 - Started reassembly of the new Detritiation Treatability Unit



- ❖ M Area Accomplishments
 - Achieved mechanical completion of Soil Remediation Cells 1 & 2
 - Started installing four soil vapor extraction wells



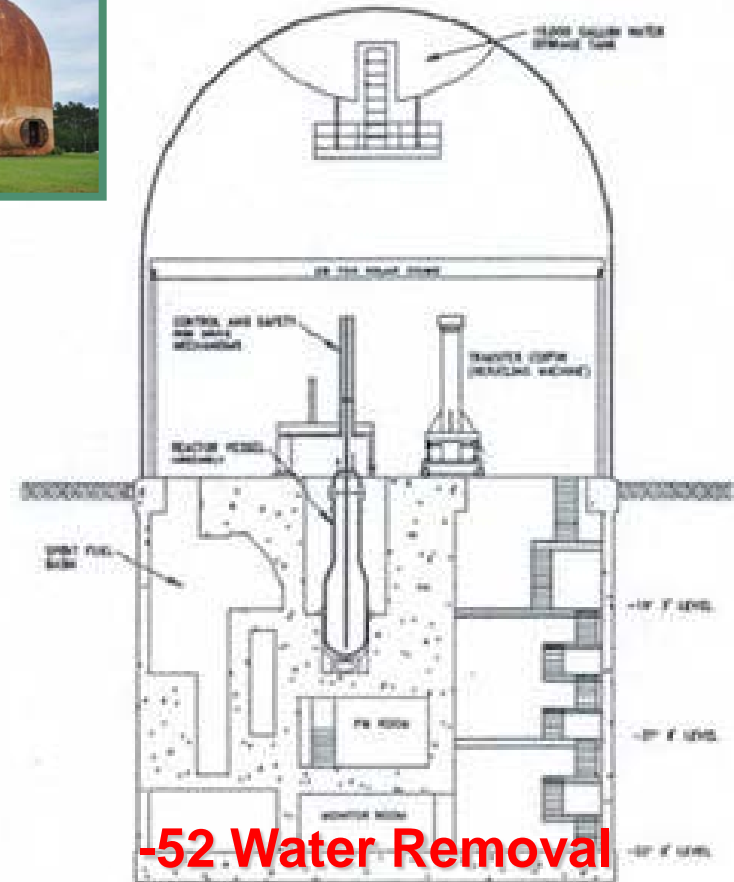
SR-0030.R3.1, Site-Wide Completion GPP & Operations

- ❖ Funding: \$226.5M
- ❖ Accomplishments
 - Completed waste characterization and core sampling at ECODS B-3 and B-5
 - Initiated biohazard removal at the 293-F stack



SR-0030.R3.2, Heavy Water Components Test Reactor Decommissioning Project

- ❖ Funding: \$10.7M
- ❖ Accomplishments
 - Completed asbestos inspection
 - Replaced ventilation exhaust blower
 - Completed public comment for the RSER/EE/CA
 - Removal residual water from the HWCTR basement (-52 foot-level)



Meeting Objectives

❖ **Employing people**

- **3,225 at SRS**

❖ **Contributing to local economy**

- **\$120 million in local subcontracts**
- **\$287 million in subcontracts**

❖ **Getting real work done**

- **Reducing operational footprint by 75%**
- **First large site to disposition legacy TRU**
- **First in situ decommissioning of nuclear reactors**

