

# Savannah River Site Rich History

## HISTORY

- Established in 1950 to support national defense missions
  - Produced tritium (only source in U.S.) and weapons grade plutonium
  - Over 38,000 workers at peak – SRS covers 198,000 acres [310 sq. mi.]



## SRS FIRSTS

- Produced radioactive fuel (Pu-238) for world's 1st "atomic battery" used in a space satellite
- Proved the existence of the neutrino
- Birthplace of modern science of ecology
- Designated 1st National Environmental Research Park
- Pioneered use of microbes in environmental cleanup
- Home to Nation's 1st waste vitrification facility



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# Savannah River Site Long-Term Asset

## TODAY

- Multi-program Site: DOE–Environmental Management and NNSA missions
- EM cleanup mission is a top priority
- Making measurable progress in cleanup of legacy waste contamination
- National asset with ongoing missions of importance to our Nation
- Dedicated and skilled Federal workforce
- Highly skilled contractor workforce ~11,000 employees
  - Savannah River Nuclear Solutions
  - Washington Savannah River Company
  - Parsons
  - Wackenhut
  - Shaw AREVA
  - U.S. Forest Service
  - University of GA



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# SRS EM Mission

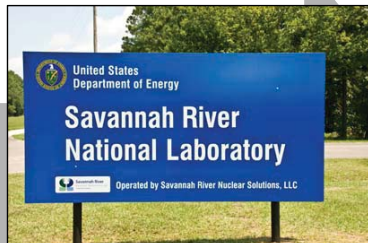
Safely and Efficiently Clean Up Environmental Legacy \* Reduce Risk  
Protect Public Health and Environment \* Transform Site for the Future

## Where We Started



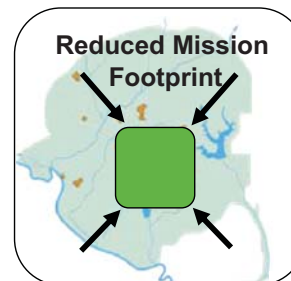
- 800+ contaminated facilities, soils and groundwater
- Excess nuclear materials
- 37 million gallons radioactive liquid tank waste

## Ongoing Missions



- Science Leadership
- Innovative Technology
- National Security
- Nuclear Nonproliferation
- Homeland Security
- Energy Independence

## THE FUTURE



- Cleanup of nuclear waste and environmental legacy complete
- Home to ongoing missions of national importance



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# SRS Budget Summary [\$M]

## EM – Environmental Management

EM FUNDING	FY 2009 Enacted	FY 2010 President's Budget
Environmental Cleanup	1,227	1,210
Safeguards & Security	134	132
Federal Program Direction	49	60
<b>TOTAL</b>	<b>1,410</b>	<b>1,402</b>

### AMERICAN RECOVERY AND REINVESTMENT ACT \*

To ensure adequate controls only 80% of ARRA funds are being allotted to the sites for obligation against contracts. The remaining 20% is being held at Headquarters and will be released after the projects are demonstrating adequate performance. Additionally, only 24% of ARRA funds can be costed until all contractor baseline plans have been submitted, reviewed, validated and approved.

**1,615\***



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# SRS is Getting the Job Done

*Proven Track Record = SUSTAINED public confidence in the Site's people and capabilities*

## CLEANUP SOLUTIONS THAT RESOLVE THE NUCLEAR WASTE LEGACY

- Turning radioactive liquid waste to a solid, safe form for disposal since 1996
- Disposing of salt waste
- Emptying and closing radioactive waste tanks
- Completing disposal of solid waste [29,000 drums of TRU waste dispositioned]
- Protecting groundwater with technologies developed at SRNL [state-of-the-art]
- Single integrated cleanup of large contaminated areas [saving \$\$ and time]
- Decommissioned over 240 facilities, or approx. 2.5 million square feet
- Remediated over 330 of 515 waste units



H Canyon

## GATEWAY FOR NATIONWIDE NUCLEAR MATERIALS CONSOLIDATION AND ULTIMATE DISPOSITION

- Maintaining critical infrastructure and capabilities [H Canyon, K Area]
- Placing nuclear materials in a form for re-use or safe disposal
- Recycling uranium for commercial power production
- De-inventory and shutdown of other facilities to reduce cost & enhance security

## CONTINUING VITAL MISSIONS FOR NATIONAL SECURITY AND ENERGY INDEPENDENCE



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# Quest for Continued Success

## Key Priorities of Fiscal Year 2009 Baseline Budget

### SAVANNAH RIVER SITE AREAS

○ = FY09 Budget Priorities  
Ongoing Mission-Related Work Continues in Other Areas

**Continue construction of Salt Waste Processing Facility [J]**

**Continue tank cleaning & closure work in F Tank Farm**

**Continue M Area closure activities**

**Progress in D&D of P & R Reactors**

**Continue TRU waste shipments [E]**

**Produce 186 canisters of vitrified waste at DWPF [S]**

**Process 1.3M gallons of low-activity salt waste at Saltstone [Z]**

**Process 700 kgal of salt solution through ARP/MCU [H]**

**Continue nuclear materials disposition in H Canyon and consolidation in K Area**

**Do it all SAFELY.**

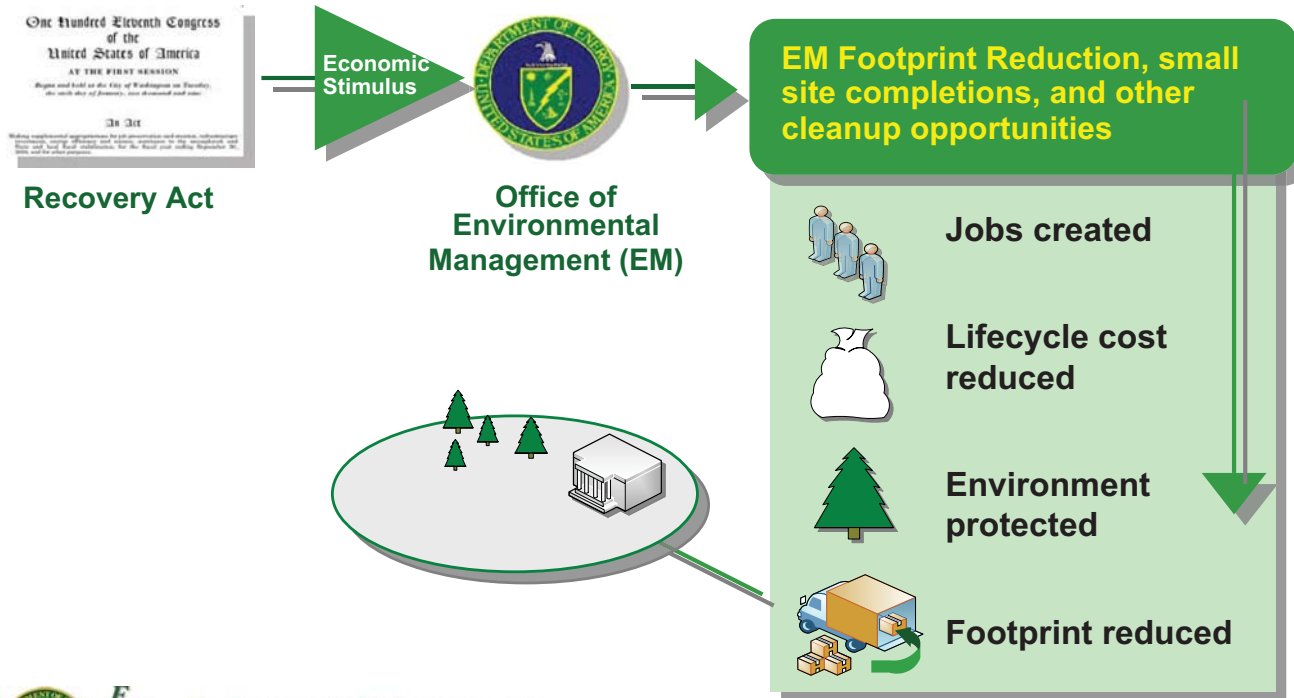


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# The Big Picture

## SRS Footprint Reduction Project End State



## Focused Priorities for SRS Team

Superior Performance \* Raising the Bar Continually \* Securing the Future

- **ACCELERATE CLEANUP WITH RECOVERY ACT FUNDING**
  - Strong DOE and contractor oversight
  - Funds spent wisely and work completed on schedule
  - Openness and accountability to taxpayers
- **MAINTAIN PERSPECTIVE**
  - Disposition of Nuclear Materials and Liquid Waste remain high priority projects
- **DOE AND ITS CONTRACTORS DEMONSTRATE ABILITY TO DELIVER**
  - Support National EM program mission
  - Meet cleanup commitments
  - Execute all work safely
  - Make remarkable reductions in risks
  - Cut lifecycle costs



# Chuck Munns, President and CEO

## Savannah River Nuclear Solutions, LLC



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## Savannah River Nuclear Solutions, LLC SRS Management and Operating Contractor

### SCOPE OF WORK

- **Management and Operating contractor for SRS and the Savannah River National Lab [contract award 1/2008]**
- **Strong heritage in Engineering, Construction, Global Defense, Technology and Manufacturing**
- **[Fluor \* Northrop Grumman \* Honeywell]**
- **6,000 experienced employees supporting DOE missions:**
  - Consolidating nuclear materials from around the nation and preparing for reuse or shipment to long-term disposal
  - Projects for national and energy security
  - Safeguarding proliferable materials
  - Putting science to work to help all EM sites reduce risk
  - Turning weapons-usable uranium into reactor fuel that powers the Southeast
  - Closing entire geographic areas

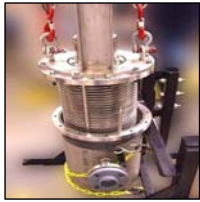


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# Science and Technology at SRS

## SRNL Putting Science to Work



- **Projects that support Complex-wide cleanup as EM's Corporate Laboratory**
  - Pretreatment solutions for tank cleanup
  - Center for Sustainable Soil and Groundwater
  - Performance of cement as waste form
- **Technologies and projects to support FY09 planned accomplishments**
  - Increase waste loading and production for DWPF
  - Public radiological protection through waste disposal assessments
- **Technologies and projects that fit into and support opening the Site for other missions/beneficial reuse**
  - Biofuels work from regional non-food products
  - Production of H2 using SRNL's Hybrid Sulfur Thermochemical process
- **Energy efficiency**
  - Smart grid research and development, using excess grid capacity
  - New biofuel power plant will dramatically improve energy production



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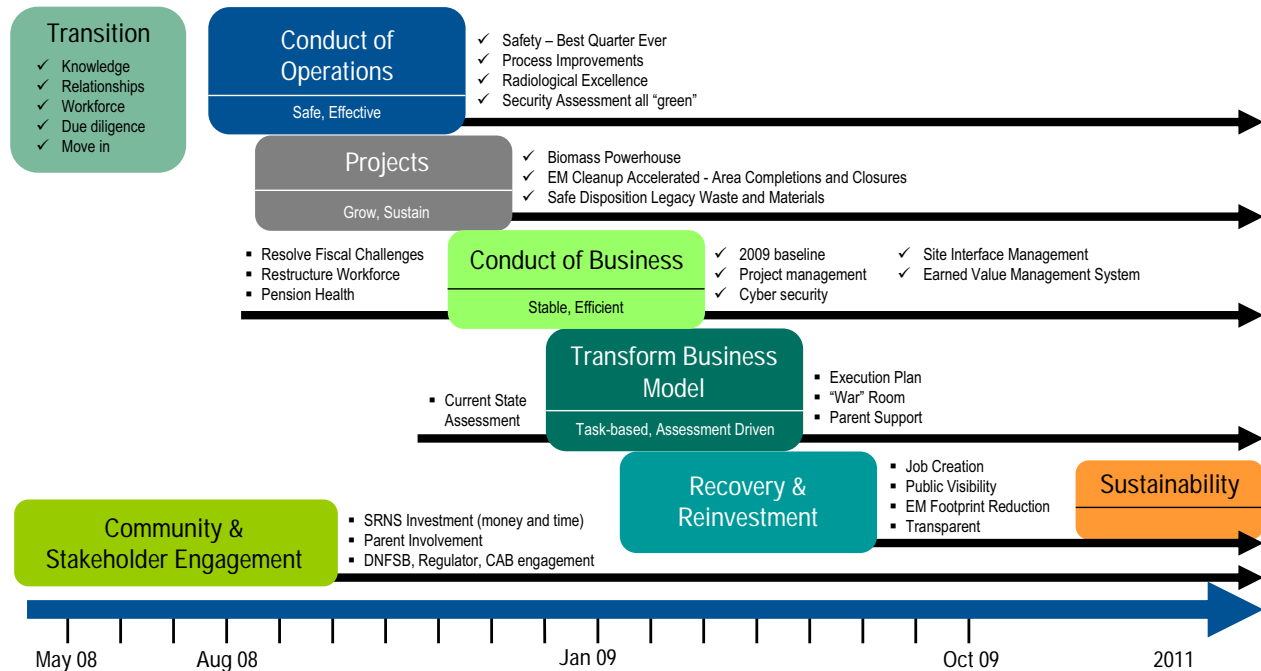


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# SRS Management and Operations

## Rigor ♦ Renewal ♦ Results



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