



A Presentation to the Savannah River Site Citizens Advisory Board



Site Strategic Planning



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**DOE-SR
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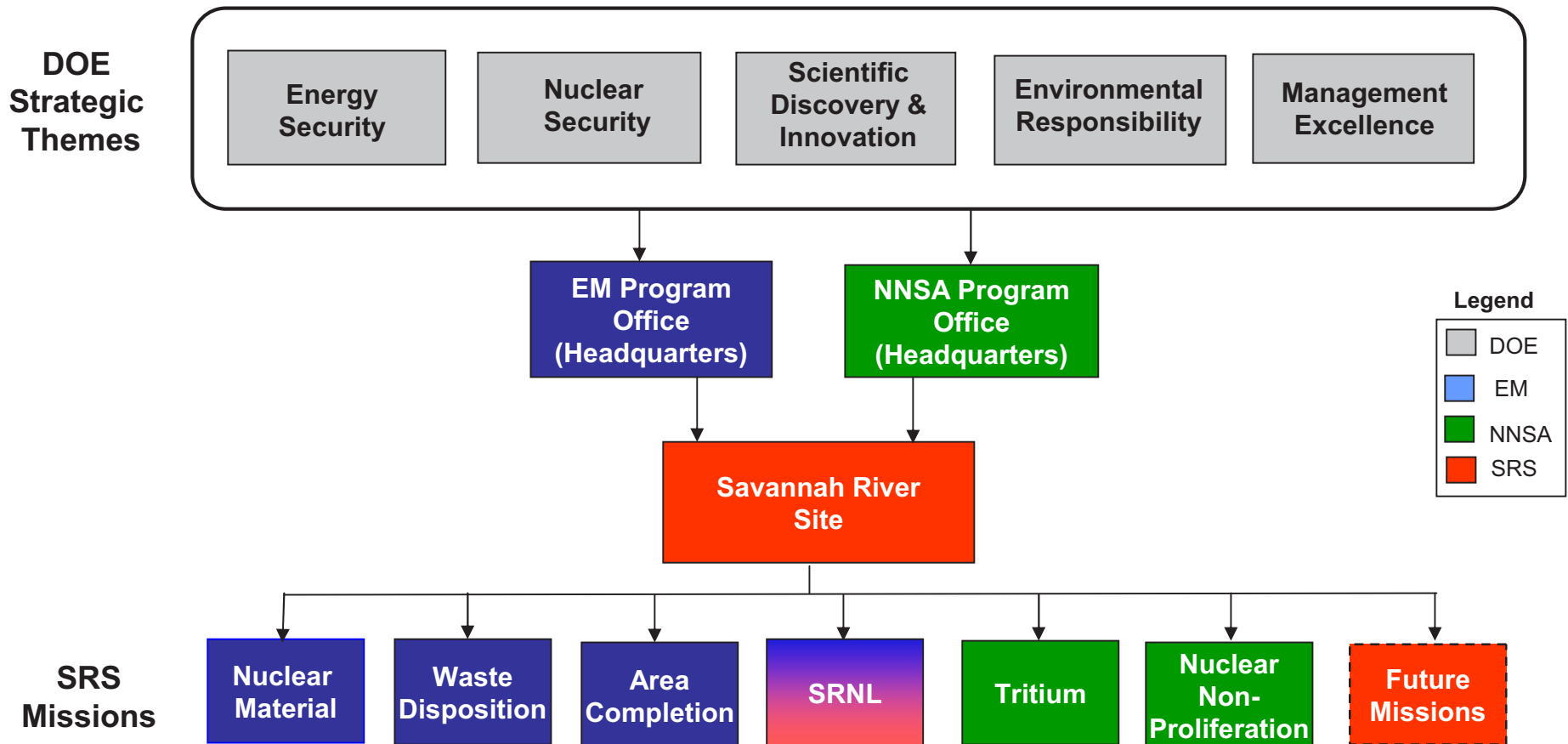


EM Environmental Management
safety ♦ performance ♦ cleanup ♦ closure

Purpose

- **Inform the Citizens Advisory Board on the site-wide strategic planning process**
- **Share an outline of the Site Strategic Plan**
- **Provide an update of the Gold Metrics for 1st Qtr Fiscal Year 2009**

Linkage to DOE Strategic Themes



DOE Strategic Themes

Energy Security

Promote reliable, clean and affordable energy

Increase our energy options and reduce dependence on oil

Improve the quality of the environment

- reduce greenhouse gas emissions
- reduce impacts from energy production and use

Nuclear Security

Transform the Nation's nuclear weapons stockpile and supporting infrastructure to be more responsive to the threats of the 21st Century

Prevent the acquisition of nuclear and radiological materials for use in weapons of mass destruction and in other acts of terrorism

Scientific Discovery & Innovation

Strengthen U.S. scientific discovery & economic competitiveness

Achieve major scientific discoveries in energy, national security and environmental challenges

Deliver scientific facilities, train the next generation of scientists and engineers

Integrate basic and applied research

Environmental Responsibility

Provide a responsible resolution to the environmental legacy of nuclear weapons production

Complete cleanup of the contaminated nuclear weapons manufacturing and testing sites

Manage the Department's post-closure environmental responsibilities

Management Excellence

Create Clear roles, responsibilities and accountability

Attract, motivate, and retain a highly skilled and diverse workforce

Build, modernize, and maintain safe and secure facilities to achieve mission goals

Integrate resource management strategy

- support mission needs
- process improvement



EM Program Vision

- **Accelerate risk reduction for the public and the environment**
- **Pursue alternative approaches to finish tank waste, nuclear materials, and spent nuclear fuel during 2015-2035 timeframe.**
- **Help make nuclear power a viable option to meet our pressing energy needs**
- **Provide excellent return on investment.**

NNSA Program Vision

- **Complex transformation to a smaller, safer, more secure and less expensive nuclear weapons complex that leverages the scientific and technical capabilities of our work force and meets national security requirements**

Source: NNSA website; www.nnsa.energy.gov

- **Eliminate where possible the accumulation of stockpiles of highly enriched uranium or plutonium.**
 - Source: NNSA Memorandum; Mission need for mixed oxide fuel fabrication facility 3-15-2006

SRS Vision

The Savannah River Site is recognized as a long-term national asset in the areas of national security, energy independence, innovative technology, and environmental stewardship and there is sustained public confidence in its people and capabilities.



SRS EM Mission

Safely and efficiently clean up the environmental legacy of our nation's Nuclear weapons program at the Savannah River site to protect public Health and the environment and transform the Site for the future

To accomplish the mission we:

- **Treat and dispose of wastes;**
- **Remove Contaminated facilities;**
- **Clean up soils and groundwater;**
- **Disposition surplus nuclear material; and**
- **Support national security and our nation's energy independence**

To support the mission we:

- **Perform reliably and responsibly;**
- **Expand the capabilities of Savannah River National Laboratory;**
- **Make more of the Site available for new missions**
- **Assure costs to provide a better value for taxpayers**



EM: Nuclear Material Mission

- **Safely, securely, and efficiently store and process excess nuclear material to improve our security posture, protect public health and the environment, and to allow either beneficial reuse or disposal of these materials thereby supporting transformation of the Savannah River Site for the future and supporting other national priorities.**
- **Scope of Mission includes:**
 - **Plutonium (PU)**
 - **Highly Enriched Uranium (HEU)**
 - **Spent Nuclear Fuel (SPF)**
 - **Misc Nuclear Material: Depleted Uranium Oxide, Neptunium, Heavy Water**



EM: Waste Disposition Mission

Liquid Waste

- Safely treat and disposition 36 million gallons of radioactive liquid waste and close 49 underground storage tanks in which the waste now resides by 2028 to reduce risk and meet regulatory commitments

Solid Waste

- Treat, store, transport and dispose of Transuranic (TRU), Hazardous (HW), mixed low-level (MLLW), low-level (LLW), and sanitary wastes generate at SRS to reduce risk to human health and the environment, supporting on-going missions, and enabling footprint reduction



EM: Area Completion Mission

- **The Area completion project will safely deactivate and decommission contaminated facilities and remediate soils and groundwater to complete cleanup for large areas of SRS to protect human health and the environment and make significant areas of the site available for new missions**

Savannah River National Laboratory

- **Address the challenges of cleaning up the environmental legacy of the Nation's weapons program and provide key support to help meet Homeland Security and Energy Security objectives**
- **The scope of SRNL's mission includes:**
 - **Technical Leadership for DOE EM mission**
 - **Alternate Energy Research**
 - **FBI Radioactive Laboratory**

NNSA: SRS Missions

Defense Program

Tritium: Continually replenish the Nations Tritium supply by:

- **Recycling Tritium from existing weapons**
- **Extracting Tritium from irradiated rods**

Source: SRS Tritium 10 Year Site Plan

Build and Operate

- **Pit Disassembly and Conversion Facility**

Source: NNSA Memorandum, Mission need for mixed oxide fuel fabrication facility 3-15-2006

Nuclear Non-Proliferation Program

Build and Operate

- **Waste Solidification Facility**
- **Mixed Oxide Fuel Fabrication Facility**

Source: NNSA Memorandum, Mission need for mixed oxide fuel fabrication facility 3-15-2006



Strategic Planning Process

- **Assess the Strategic Environment**
 - Internal Factors
 - External Factors
- **Conduct an in-depth self analysis of SRS Strengths, Weaknesses, Opportunities and Threats (SWOT analysis)**
- **Identify Strategic Issues**
- **Establish Strategic Goals and Objectives**



Draft Strategic Plan Outline

- **Vision and Mission**
- **Environmental Scan**
- **Support of DOE Strategic Themes**
 - **Energy Security**
 - **Nuclear Security**
 - **Scientific Discovery & Innovation**
 - **Environmental Responsibility**
 - **Management Excellence**
- **Goals**
- **Challenges & Opportunities**
- **Crosscutting Initiatives**
- **Plan for Implementation**



Gold Metrics

Project	Performance Measures	Units	Performance				
			Past	Fiscal Year		Lifecycle	
			End of FY 2008	Actual thru 1st Qtr - FY09	FY 2009 Target	Actual thru 1st Qtr - FY09	Lifecycle Target
PBS 11	DU & U Packaged for Disposition	MT	9,974	1,562	2,136	11,536	23,182
	eU Packaged for Disposition	containers	3,004	0	0	3,004	2,809
	PU/U Residues Packaged for Disposition	kg bulk	490	0	0	490	490
	Pu Packaged for Long-term Disposition	containers	919	0	0	919	919
	Category I Areas Eliminated	areas	2	0	0	2	3
PBS 12	SNF Packaged for Disposition	MTHM	3	0	1.5	3	40
PBS 13	LL/LLMW Disposed from Legacy/ Newly Generated	m3	100,620	1,595	4,444	102,215	137,579
	LL/LLMW Disposed from ER & DD	m3	9,881	487	718	10,368	764,499
	TRU Disposed (Shipped to WIPP)	m3	5,691	65	160	5,756	15,658
PBS 14	HLW Packaged for Disposition	containers	2,599	45	186	2,644	5,862
	Liquid Waste Eliminated	k-gallons	1,174	0	700	1,174	33,100
	Liquid Waste Tanks Closed	tanks	2	0	0	2	51
PBS 30	Remediation Complete	sites	360	0	0	360	515
PBS 40	Facility Completions	facilities	245	0	0	245	990



Conclusions, Next Steps

- **Comments from the CAB have been received and will provide input to the site Strategic Plan**
- **A draft of the Strategic Plan is scheduled to be completed by 1/31/09**
- **The finalized site Strategic Plan will be presented to the Citizens Advisory Board at the March meeting**



Acronym List

EM	Environmental Management
NNSA	National Nuclear Security Administration
SRNL	Savannah River National Laboratory
HEU	Highly Enriched Uranium
LLW	Low Level Waste
LLMW	Low Level Mixed Waste
MLLW	Mixed Low Level Waste
PU	Plutonium
SNF	Spent Nuclear Fuel
TRU	Transuranic
MOX	Mixed Oxide

