



U.S. DEPARTMENT OF
ENERGY

Site Safety Overview

Presented to

SRS Citizens Advisory Board

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U.S. Department of Energy – Savannah River
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EM *Environmental Management*
safety ♦ performance ♦ cleanup ♦ closure

Purpose

**Provide information on the Savannah
River Site Safety Program as Requested
by the Citizens Advisory Board**



Brief History of the Savannah River Site (SRS)

SRS: A Long-Term Asset

Rich History

- Established in 1950 to support national defense missions:
 - Produced tritium (only U.S. source) and weapons-grade plutonium
 - Over 38,000 workers at peak
 - Site covers 198,000 acres (310 square miles)

Today

- Multi-program Site with national missions:
DOE-Environmental Management (EM) and National Nuclear Security Administration (NNSA)
- Top priority: EM cleanup and risk reduction mission
- Making measurable progress in cleanup of legacy waste contamination, reduction of stored legacy waste, and closure of defense-related nuclear reactors
- Highly skilled federal and contractor workforce of greater than 13,000 persons
- Focused Federal oversight and stewardship



Transition to Multiple Site Contractors

- 1950 to August 2008 – SRS was managed and operated under a single contract.
- Core Business Areas: Operations, Infrastructure, and National Laboratory
- Business model changes were necessary to
 - Gain operational efficiencies
 - Prepare SRS for the future
- DOE-SR selected a multi-contract arrangement and let these awards:
 - Management and Operations (M&O) contract to Savannah River Nuclear Solutions (SRNS) – 8/1/08
 - Liquid Waste Contract to Savannah River Remediation (SRR) – 7/1/09

Safety: The business imperative for our successful transition



DOE Oversight of Contractor Safety Programs

➤ Role of DOE-SR in the Site's Safety Performance

▪ Daily Oversight/Assessment by:

- Facility Representatives
- Safety System Oversight Representatives
- Subject Matter Experts

▪ ISMS Reviews/Validation Per Contract Clause (excerpt below)

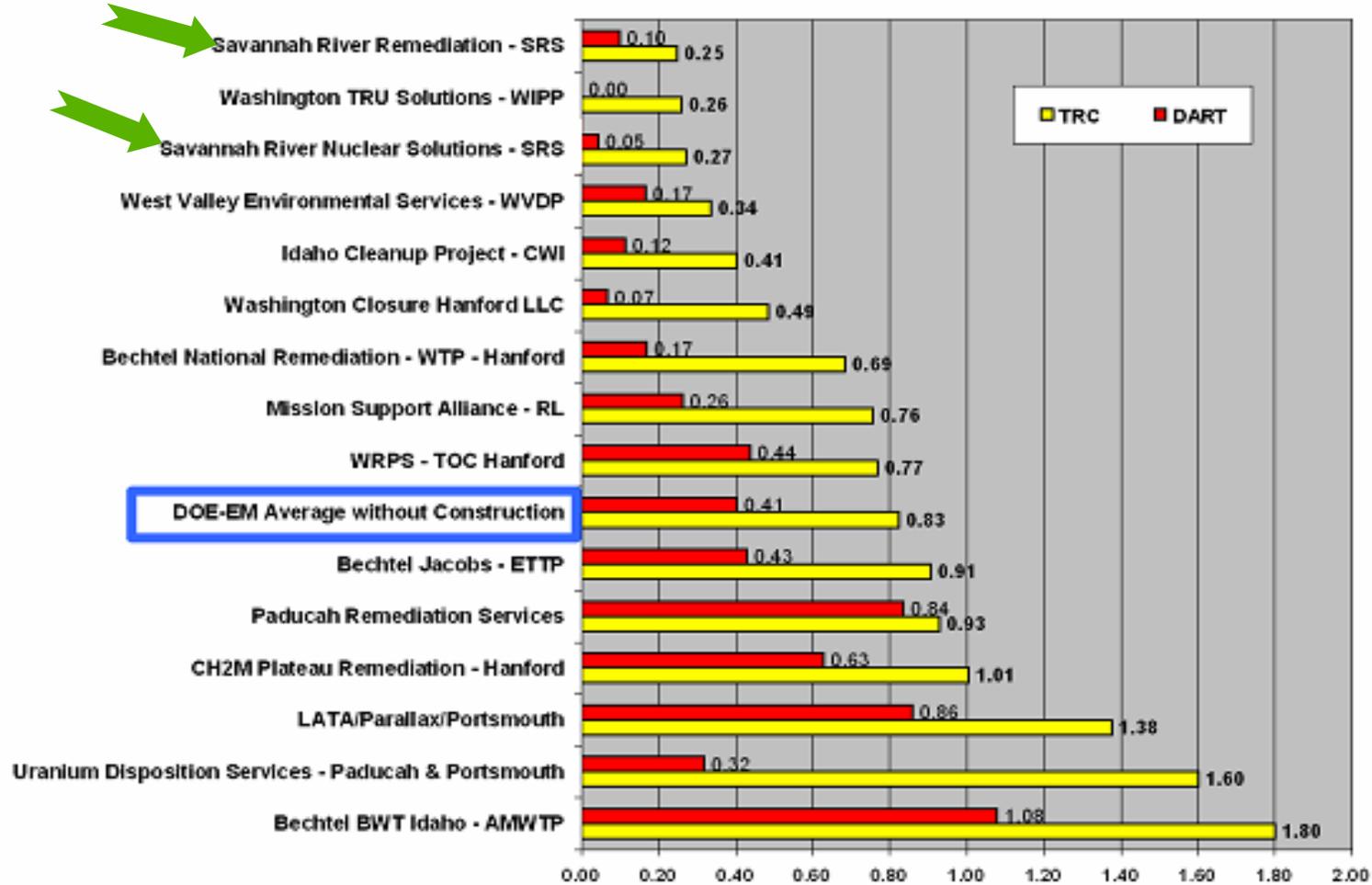
- SRNS (July 29, 2009)
- SRR (July 19, 2010)

(7) The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the contractor. These agreed-upon conditions and requirements are requirements of the contract and binding upon the contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.



The Proof is in Performance

DOE-EM Prime Contractor Safety Ranking
 FY 2010 - Including Service Subcontractors (Ranked by TRC Rate)
 > 600,000 hours per year



DOE-SR Expectations for Contractor Safety Programs

- **Maintain effective policies and procedures that establish a framework for safe operations**
- **Implement appropriate controls and active field supervision to ensure that these requirements are adhered to by employees**
- **Balance mission and safety**
- **Demonstrate commitment to safety through leading performance indicators**



Framework: Integrated Safety Management System (ISMS)

Define Scope of Work

- Translate Mission into Work
- Set Expectations
- Prioritize Tasks
- Allocate Resources

Analyze Hazards

- Identify Hazards
- Analyze Hazards
- Categorize Hazards

DO WORK SAFELY

- Line Management Responsibility
- Clear Roles & Responsibilities
- Competence per Responsibilities
- Balanced Priorities
- Identification of Safety Standards & Requirements
- Tailored Hazard Control
- Operations Authorization

Feedback/Improvement

- Collect Feedback Information
- Identify Improvement Opportunities
- Make Changes to Improve
- Oversight & Enforcement

Perform Work

- Confirm Readiness
- Perform Work Safely

Develop/Implement Controls

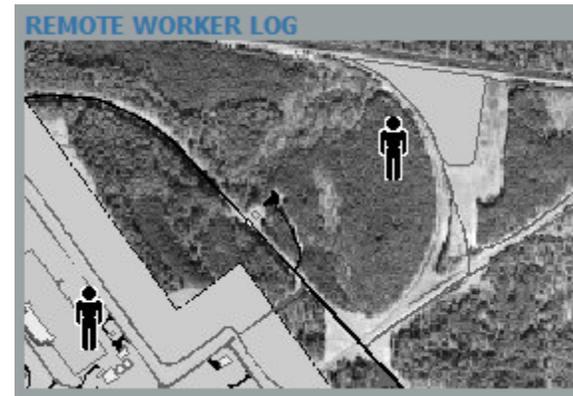
- Identify Standards and Requirements
- Identify Controls to Prevent/Mitigate Hazards
- Establish Safety Controls
- Implement Controls

Work



Integrated Safety Management Integrated Council (ISMIC)

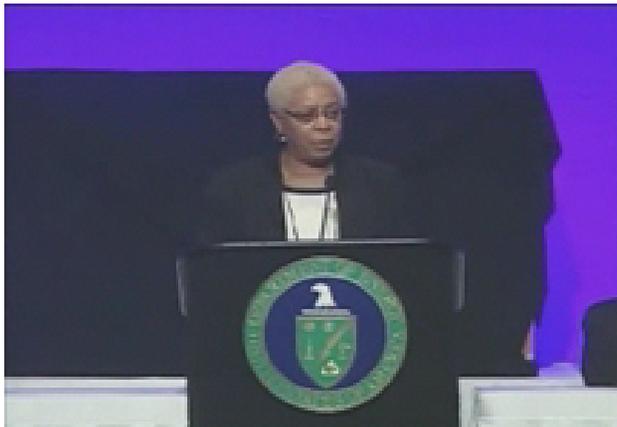
- DOE-SR sponsors and participates on the ISM Integrated Council, which is comprised of major contractors from across the site.
- Major initiatives include, but are not limited to:
 - Conduct of Operations
 - ISMS and Quality Assurance Declaration
 - Pandemic Influenza Response
 - Site Access Requirements
 - SRS Remote Worker Notification Policy
 - Chemical Management Center Global Harmonization Standard Team
 - Quarterly Subcontractor Safety Forum
 - 2010 DOE ISMS Champions Workshop Sponsor



DOE 2010 ISMS Champions Workshop



- Date: September 13-16, 2010
- Location: Augusta, Georgia
- Attendees: More than 1,000 — *A DOE Complex-wide Record*
- Vendors: Sold Out Venue
- Success Factors:
 - Appointed a single, responsible person
 - Dedicated a project team
 - Developed and implemented a resource loaded schedule and budget
 - Followed project management principles



Voluntary Protection Program (VPP) – Recognition Program

➤ VPP Performance Measures:

- Management Leadership
- Employee Involvement
- Worksite Analysis
- Hazard Prevention and Control
- Safety and Health Training



➤ Results:

- SRNS—STAR and Legacy of Stars (Recertified May 2010)
- SRR—STAR and Legacy of Stars (Recertification Recommended February 2011)
- Parsons—Preparing application for VPP STAR Status with assistance of SRNS And SRR



Applicable Safety Regulations and Directives

➤ Code of Federal Regulations (CFR)

- 10 CFR 820, *Procedural Rules for DOE Nuclear Activities*
- 10 CFR 835, *Occupational Radiation Protection*
- 10 CFR 830, *Nuclear Safety Management*
- 10 CFR 707, *Substance Abuse Programs at DOE Sites*
- 10 CFR 1021, *National Environmental Policy Act Implementing Procedures*
- 10 CFR 851, *Worker Safety and Health Program*

➤ DOE Directives

- DOE Policy 411.1, *Safety Management Functions, Responsibilities, and Authorities*
- DOE Order 414.1C, *Quality Assurance*
- DOE Order 420.1B, *Facility Safety*
- DOE Policy 226.1A, *Department of Energy Oversight Policy*
- DOE Order 231.1A, *Environment, Safety and Health Reporting*
- DOE Policy 450.4, *Safety Management System Policy*
- DOE Order 450.1A, *Environmental Protection Program*



Safety at the Worker Level

➤ 10 CFR 851 Scope and Purpose:

- Applies to contractor activities at DOE sites
- Establishes requirements for worker safety and health

➤ Results:

- Contractors cannot perform work at a DOE site without an approved Worker Safety and Health Program (WSHP)
- All DOE-SR contractors currently working at SRS have a DOE-SR approved WSHP which facilitates effective worker safety and health

You Have a Right to a Safe and Healthful Workplace **IT'S THE LAW!**

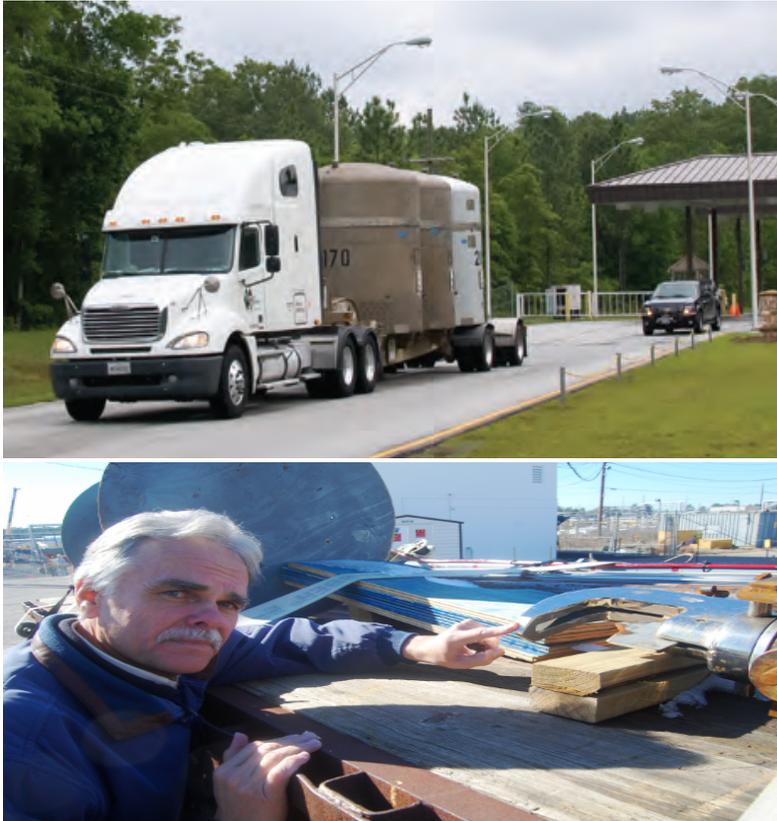
- ✓ You have the right to notify your employer or the local Department of Energy (DOE) office about workplace hazards, without reprisal. You may ask that your name not be used.
- ✓ You have the right to participate in the activities referenced in 10 CFR 851 "Worker Safety and Health Program," on official time.
- ✓ You have the right to access copies of DOE worker protection publications, the worker safety and health program for your workplace, and the standards, controls, and procedures that apply to your workplace.
- ✓ You have the right to have access to some accident and illness recordkeeping logs and the information in records of any workplace illness or injury that you experienced.
- ✓ You have the right to observe monitoring or measuring of hazardous agents, to receive the results of your own monitoring, and to be notified when monitoring results indicate an overexposure.
- ✓ You have the right to have a representative accompany the DOE's Director for enforcement or the Director's authorized personnel during the inspection of your workplace.
- ✓ You have the right to request and receive results of inspectors and accident investigations.
- ✓ You have the right to decline to perform an assigned task because of your reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious physical harm to you, coupled with your reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures.
- ✓ Your employer must post this notice in your workplace.



This 10 CFR 851 requires DOE contractors to provide their workers with a safe and healthful workplace. To obtain more information about these requirements and your rights, seek advice or assistance, or report an emergency contact your supervisor, your local DOE Office, or the DOE Office of Health, Safety and Security (<http://www.energy.gov>). Additional copies of this document may be obtained from the Employee Concerns Manager at the local DOE office at FO 814.184.0C.0002-11.02A.003 (city, state, zip code).



Results of Implementing Effective Safety Programs



- **Operations** – 100 percent on time transuranic waste shipments and poured more than 11.7 million pounds of glassified waste
- **American Recovery and Reinvestment Act (ARRA) Work** – Projects on schedule, on budget
- **Laboratory** – Innovations significantly reduce costs, e.g., filter design for waste treatment and robotic tools in first-ever retrieval of cooling coil samples from waste tanks.

...All while achieving unprecedented safety records.



Summary

- **Safety of the Public, Workers and the Environment is our primary value at SRS**
- **No job will be done at SRS unless it can be done safely**
- **Integrated Safety Management System – Ensures that safety is effectively integrated into the overall mission so that work can proceed safely**

