

Savannah River Site Regulatory Mechanisms

Shelly Wilson

Federal Facilities Liaison

South Carolina Department of Health and
Environmental Control

SRS Cleanup Legacy

High Level Waste

- 36 million gallons of highly radioactive liquid hazardous waste (over 400 million curies)
- 51 Tanks - 2 Closed in 1997

Transuranic Waste

- Over 12,000 cubic meters initially

Contamination Sites

- Over 500 potentially contaminated sites

Cleanup Tools

Federal Law: Resource Conservation and Recovery Act (RCRA)

State Law: SC Hazardous Waste Management Act

Tool: Hazardous Waste Permit

- Requires cleanup of SRS waste units

Cleanup Tools

Tool: Federal Facility Agreement (FFA)

- Outlines cleanup process and sets schedule

FFA marries cleanup processes under:

- State (RCRA/Hazardous Waste Permit),
- EPA (Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)),
and
- DOE (CERCLA)

FFA has closure schedule for 22 tanks by 2022

Contamination Cleanup Status

- Under FFA, DHEC formed a cleanup team in the 90's with SRS and EPA
 - Make the cleanup process more efficient
 - Integrate all regulatory requirements into comprehensive cleanup decisions
- Over 60% of contaminated sites at SRS have been remediated
- T-Area remediation, completed in 2006, is an example increased efficiency

Cleanup at T-Area



This project was completed in 36 months, 48 months ahead of the original schedule.

SRS Cleanup Lessons Learned

Major efficiency examples:

- Team approach
- Scoping process
- Area closure concept

Challenges:

- Keeping pace of cleanup steady
 - Budget uncertainty or decrease
 - Best use of resources

Legacy Waste Treatment Tools

Federal Law: Federal Facility Compliance Act

Tool: **Consent Order** between SC and SRS

- Requires high level waste to be treated by 2028
- Over half of legacy TRU waste (12,000 m³) disposed
- Most low level/hazardous streams already disposed

State Law: SC Solid Waste Policy and Management Act

Tool: **Saltstone Disposal Facility Permit**

- Has startup schedule for needed high level waste treatment facilities (SWPF)

High Level Waste Closure Tools

Tool: Industrial Wastewater Closure Plan

- Considers standards and guidance of all previously mentioned statutes
- Undergoes public review and comment
- Accompanied by FFA cleanup decisions

Federal Law: Section 3116 of 2005 National Defense Authorization Act

- Specifies residuals may not remain unless pursuant to a State-approved closure plan or permit