Waste Management - Liquid Waste

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Savannah River Site Information Pods

Citizens Advisory Board
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Liquid Waste Overview

- The U.S. Department of Energy awarded Savannah River Remediation the six-year base contract, plus two year option, for high level waste clean-up
- Contract began July 1, 2009; Extended by DOE until June 30, 2017
- Currently about 2,000 employees

Environment and Public Safety

- Protect the environment
- 36 million gallons of high level waste
- 43 underground tanks

Waste Disposition

- Support U.S. government's nuclear nonproliferation agenda = H Canyon
- Remove waste from tanks and stabilize into glass and grout

Clean Up

- Clean the empty tanks
- Operationally close tanks
- Seven tanks closed total
- One tank being grouted right now
A Focus on Safety

Industrial Safety

Radiological Safety

Safety: Perspective/Awards
- Construction forces (legacy and current) accumulated over 27 million safe hours
- Recipient of National and State Awards in recognition of safety performance (National Safety Council Industry Leader, Occupational Excellence Achievement and Million Hour Awards; S.C. Chamber of Commerce and S.C. Department of Labor, Licensing and Regulation Awards)
- Reached contract-high 9.8 million safe hours in operations in 2015.

Environmental Safety

Chemical Safety
An Integrated System

- Tank Closure
- Tank Cleaning
- Sludge Bulk Waste Removal
- Sludge Waste Storage
- Salt Waste Removal & Batch Feed Preparation
- Salt Separation
- Saltstone
- Saltstone Disposal Units
- Evaporation
- H.-Canyon
Where it Starts: Waste in the Tanks

Inventory values as of 2015-09-30

“The high-level waste at the Savannah River Site represents the single largest environmental risk in South Carolina.” – S.C. Department of Health and Environmental Control
Liquid Waste Facilities

- Actinide Removal Process
- Saltstone Production Facility
- Modular Caustic Solvent Extraction Unit
- Waste Tanks
- Defense Waste Processing Facility
Salt Processing

- Saltstone Disposal Unit (SDU) SDU 3 and 5 currently being filled with a grouted decontaminated salt solution
- SDU 6 primary construction complete
  - 30 million gallon capacity
  - 6 more mega units planned
Production Last Year

- DWPF: 93 canisters produced in FY 15
- ARP/MCU: 752,000 gallons processed
- Saltstone: 1.5 million gallons of grout put into Saltstone Disposal Units
Tank Closure

- Tank Closures continue at a pace unheard of six years ago
  - Five tank closures completed during the past 6 years; 7 total at SRS, all old-style tanks; 8th tank being closed

Tank 12 Grouting

Began grouting: 1/19/16

FFA Closure Date: 5/31/16

Operationally Closed
Tank Closure
Conclusion

• We continue to perform safely
  – Focus on safety has been excellent
• Sharing our technology and our people across the DOE Complex for cost-savings
• Operations are proceeding as planned, and progress is being made
• Waste treatment and tank closure work reduces the risk for all of us