



U.S. DEPARTMENT OF
ENERGY

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



Environmental Safety



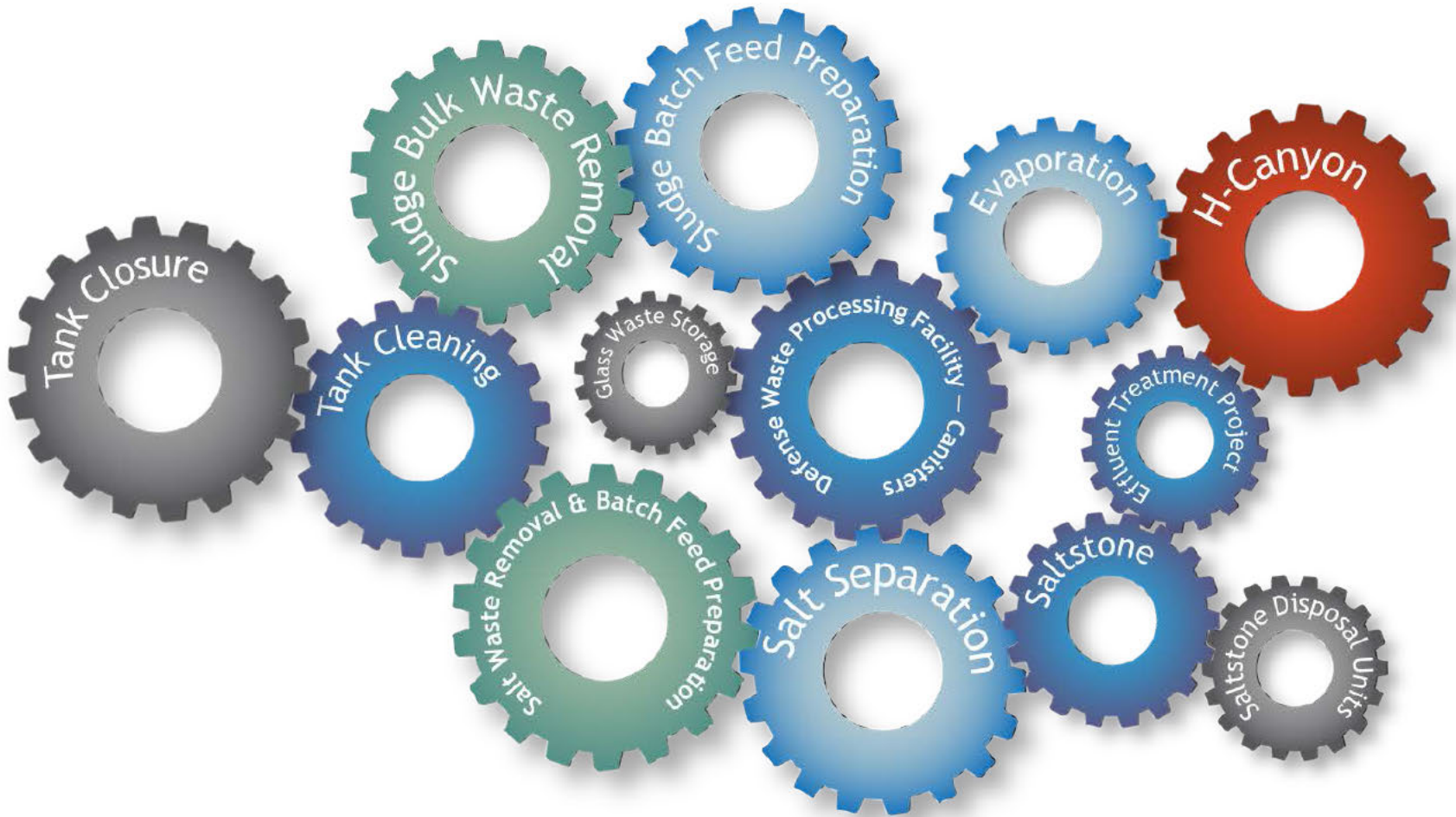
Chemical Safety

Safety: Perspective/Awards

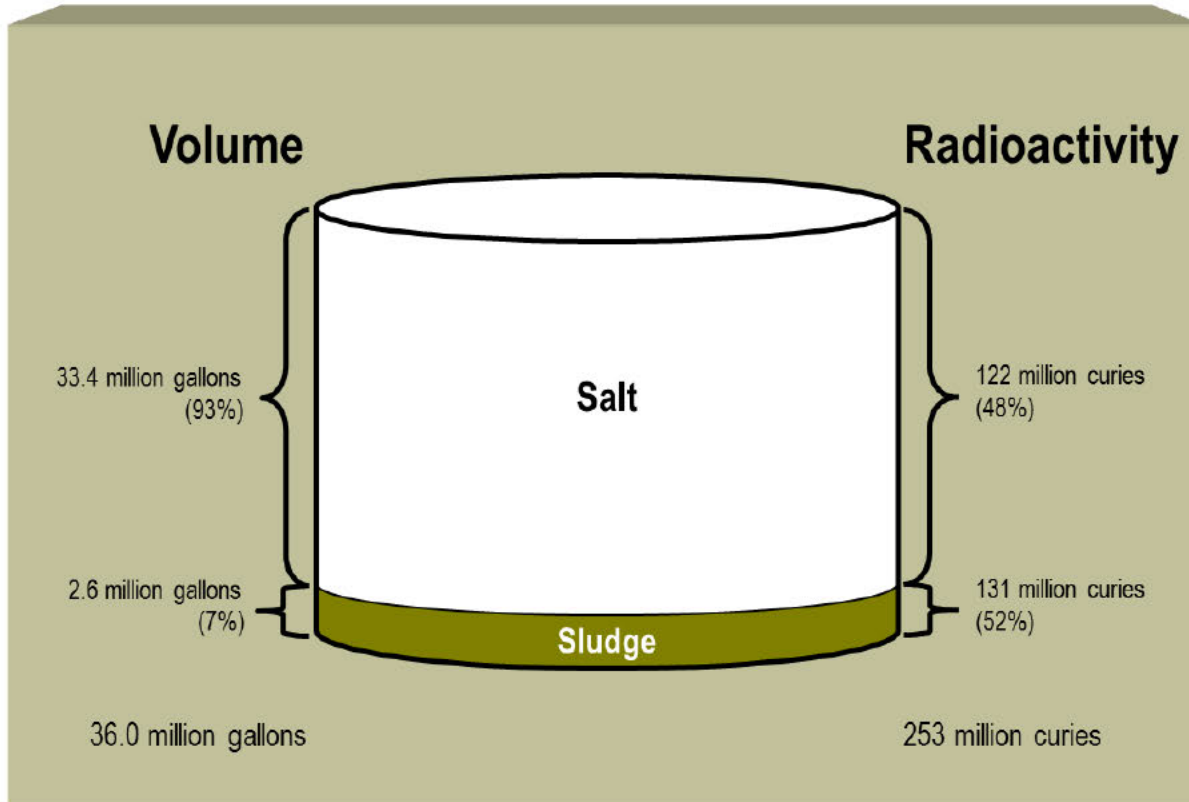
- Construction forces (legacy and current) accumulated over 27 million safe hours
- Recipient of National and State Awards in recognition of safety performance (National Safety Council Industry Leader, Occupational Excellence Achievement and Million Hour Awards; S.C. Chamber of Commerce and S.C. Department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



An Integrated System

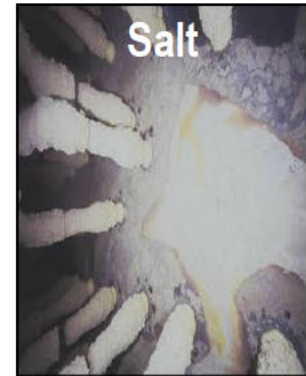


Where it Starts: Waste in the Tanks



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



DWPF Video



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

Defense Waste
Processing Facility



- **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**

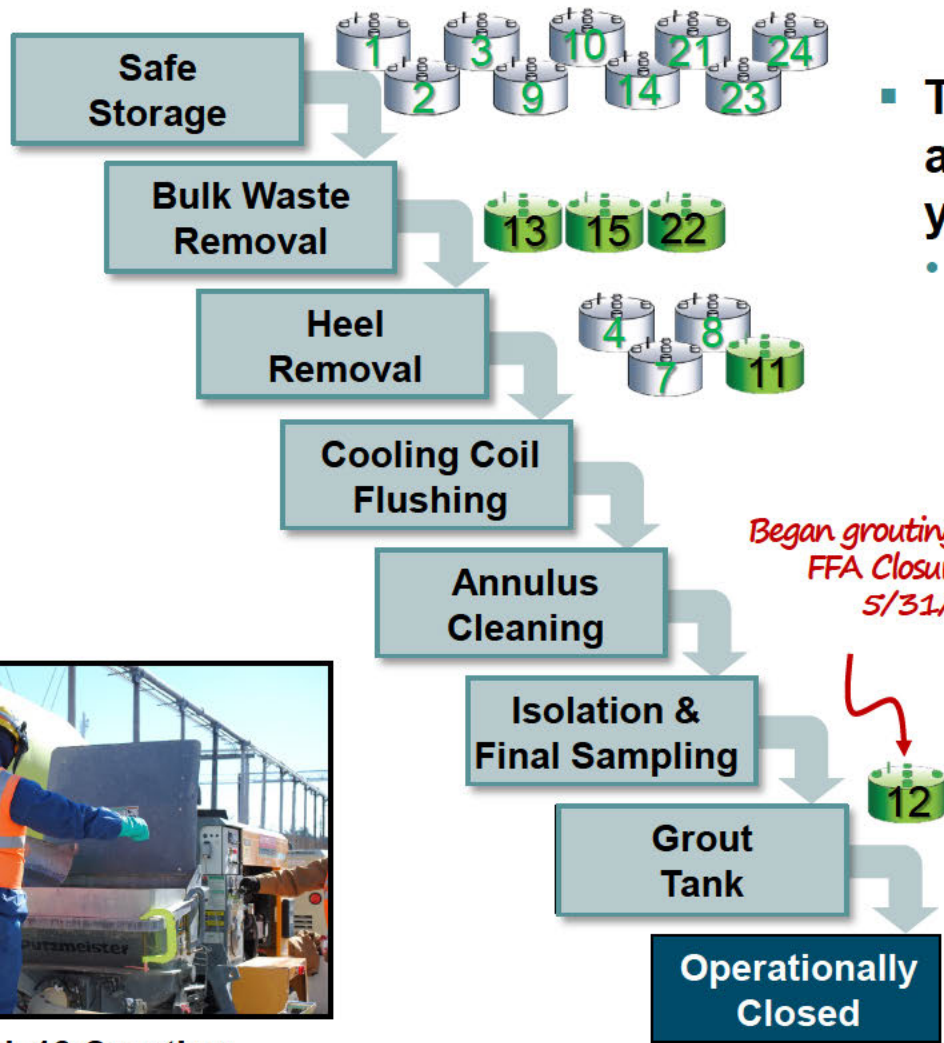
Saltstone Facility



Actinide Removal Process (ARP)
& Modular Caustic Side Solvent Extraction Unit (MCU)



Tank Closure

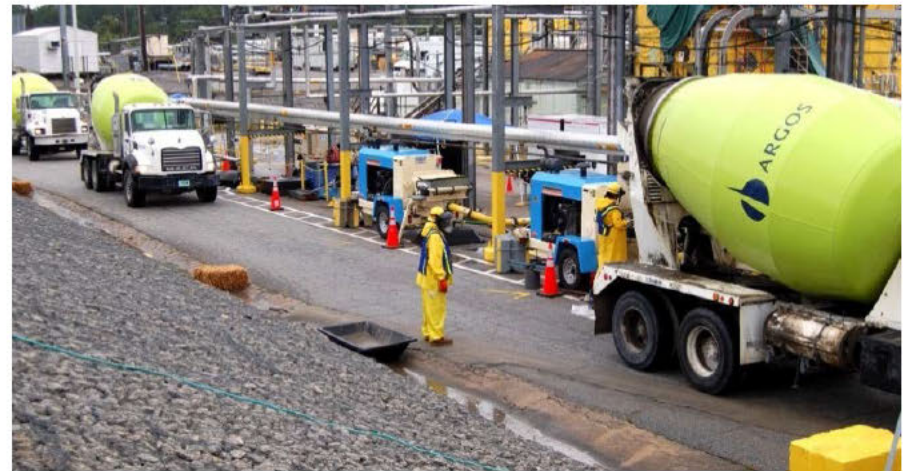


- Tank Closures continue at a pace unheard of six years ago
 - Five tank closures completed during the past 6 years; 7 total at SRS, all old-style tanks; 8th tank being closed



Tank 12 Grouting

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**

