



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Start-up of Salt Waste Processing Facility – System Plan Impacts

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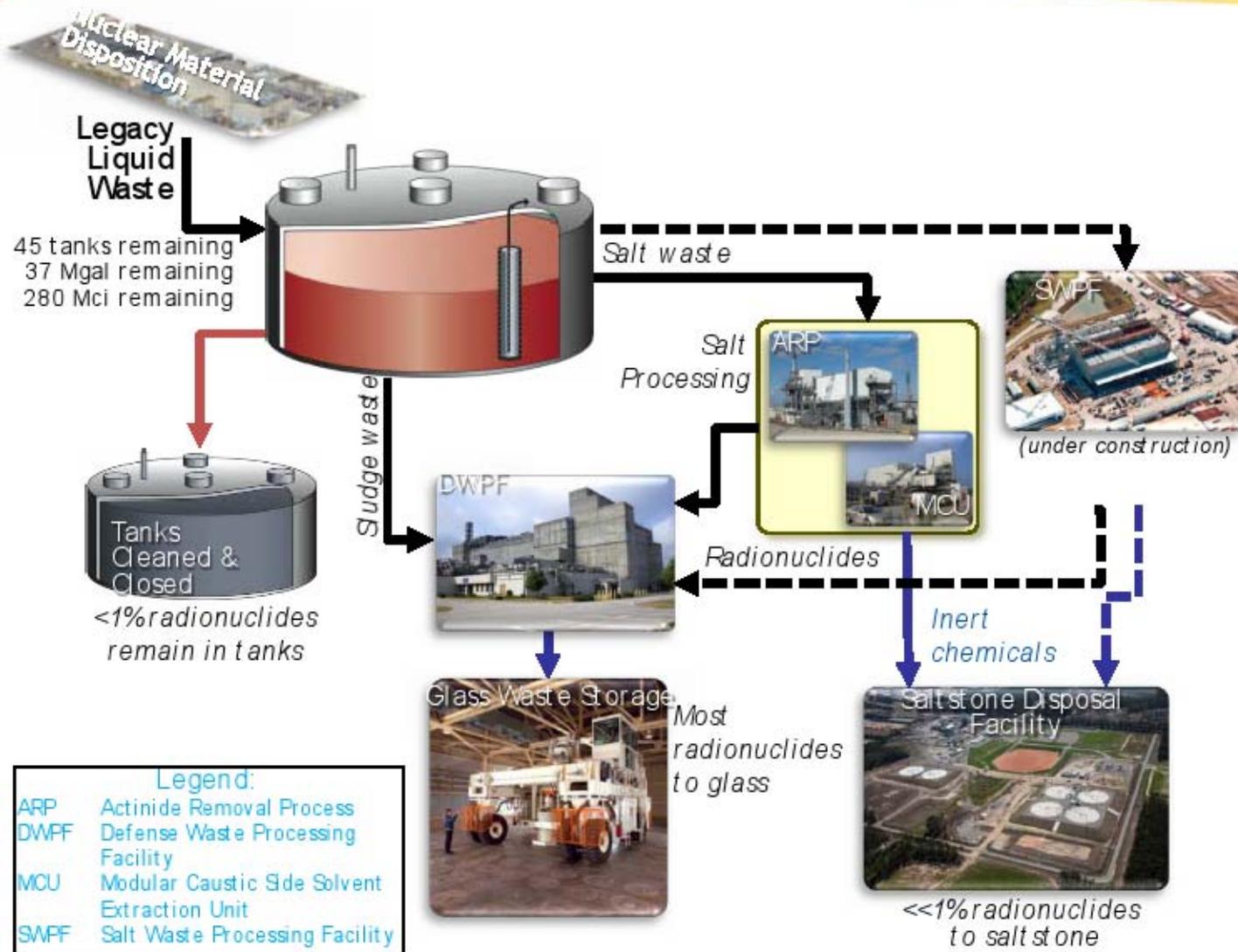
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**Savannah River
National Laboratory™**

OPERATED BY SAVANNAH RIVER NUCLEAR SOLUTIONS

SRR Liquid Waste Program Operational Highlights



51 Tanks

7.3 Mgal salt waste treated

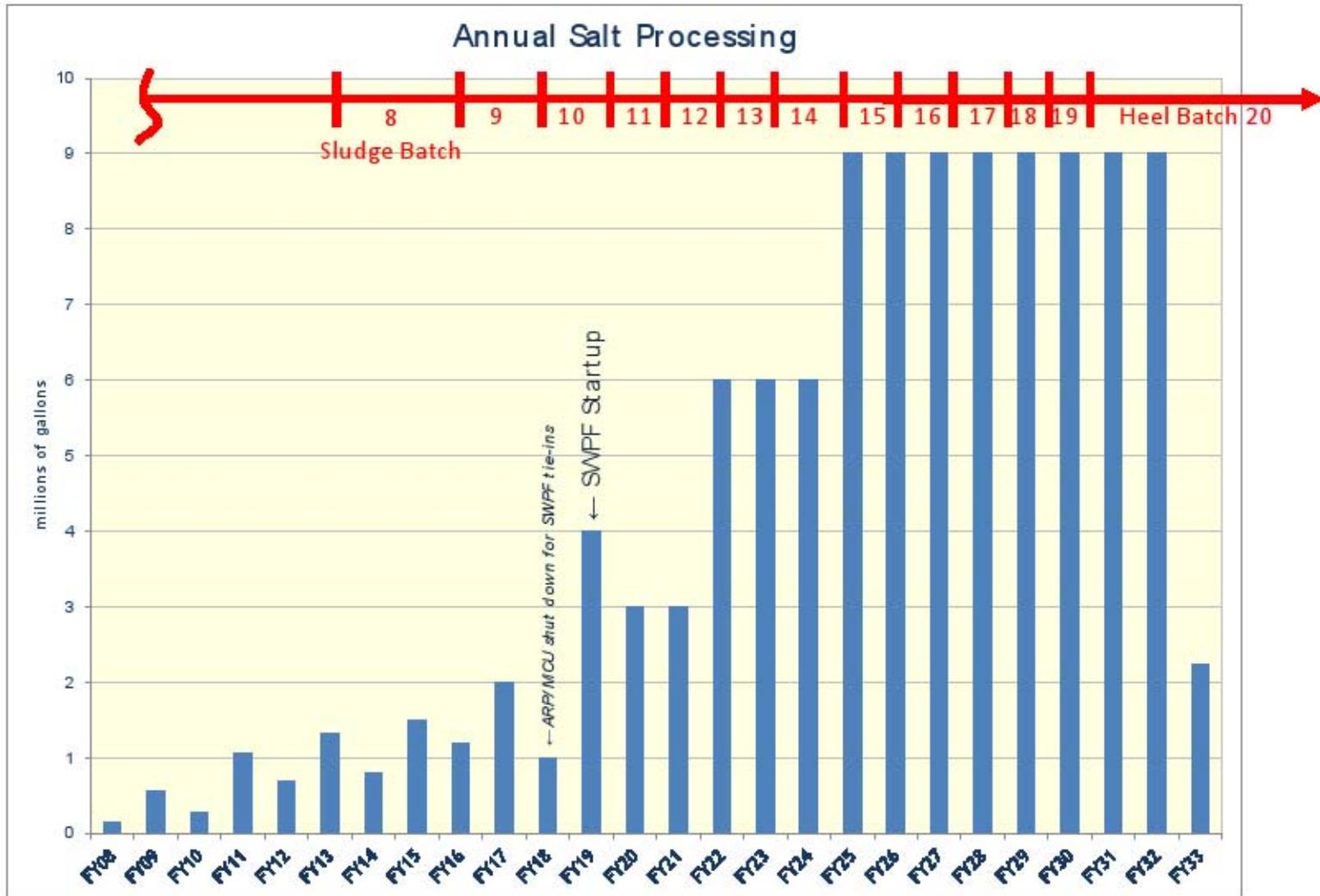
16.3 Mgal grout disposed
containing **417** kCi

3,871 of 8,582 canisters poured

6 grouted & closed
10 in closure sequence
69% old style empty
16% new style empty

Parameter	Revision 19
Final Type I, II, and IV tanks BWRE complete	2028
Final Type I, II, and IV tanks complete operational closure	2032
Complete bulk sludge treatment	2030
Complete bulk salt treatment	2033
Complete heel treatment	2039
Maximum canister waste loading	40 wt%
Nominal maximum annual canister throughput rate	276
Total number of cesium-only canisters produced	0

Annual SWPF Throughput



- Current revision of the Liquid Waste System Plan (Rev 19) projects that bulk sludge processing will complete 3 years before the completion of salt processing at SWPF in 2033
- In order to accommodate the cesium laden strip-effluent stream from SWPF, DWPF will need to produce ~280 canisters per year
- Solids generated from waste tank cleaning (heel removal/chemical cleaning) are insufficient to support a 280 canister per year production rate
- For system planning purposes, it is assumed that simulated sludge is added in the tank farm to meet current Glassmaker/PCCS constraints
- New frit formulations may reduce or eliminate the need for sludge simulants but would not decrease the number of canisters required to disposition the SWPF effluents