Salt and Sludge Batch Preparation Overview

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SRS Tank Waste Inventory

Volume
- 15.5 Mgal (45%)
- 16.2 Mgal (47%)
- 2.6 Mgal (8%)
- 31.7 Mgal (92%)

Curies
- 105 MCI (47%)
- 117 MCI (52%)
- 12 MCI (5%)
- 110 MCI (48%)

Salt Supernate
- 34.3 Million Gallons (Mgal)
- 227 Million Curies (MCI)

Inventory values as of 2021-12-31
Safe storage, treatment, and disposition of SRS liquid waste requires synchronization of several highly interdependent nuclear facilities and chemical operations.
Batch recipes are based on accessible sludge heels

Formulated to meet nuclear safety & production requirements

Sludge is washed to remove excess salt solution

Wash water can be evaporated or used in Salt Batch Preparation

Sludge washing and DWPF recycle returns create 1.3 gallons of salt waste for every 1 gallon of sludge

Maximizes HLW canister waste loading
HLW Salt Batch Feed Preparation

- Batch recipes are based on a blend of salt sources
- Formulated to meet nuclear safety & production requirements
- Salt retrieval, preparation and batching increase waste volume by 3X
- Blend Tanks can be in the Make-up, Analysis, or Qualified stage independently
- Proven ability to compile a million-gallon SWPF batch in less than 90 Days
- Delivers over 92% of the tank waste material for SWPF batches and for TCCR dissolved salt solution processing
Liquid Waste System Footprint

170 acres
3 miles in length

Saltstone Production/Disposal Facilities

H-Tank Farm
- 29 tanks
- 2 evaporators (2H & 3H)
- Volume reduction and pre-treatment occurs in H Area

F-Tank Farm
- 22 tanks

Inter-Area Line
- 2.2 miles
- Pump pits at each end
- Diversion boxes at each end and at high point in the middle

Effluent Treatment Facility