



**Savannah River  
Remediation**

*We do the right thing.*

# Saltstone Overview



**Presented to Citizens Advisory Board Waste Management  
Committee  
July 26, 2010**

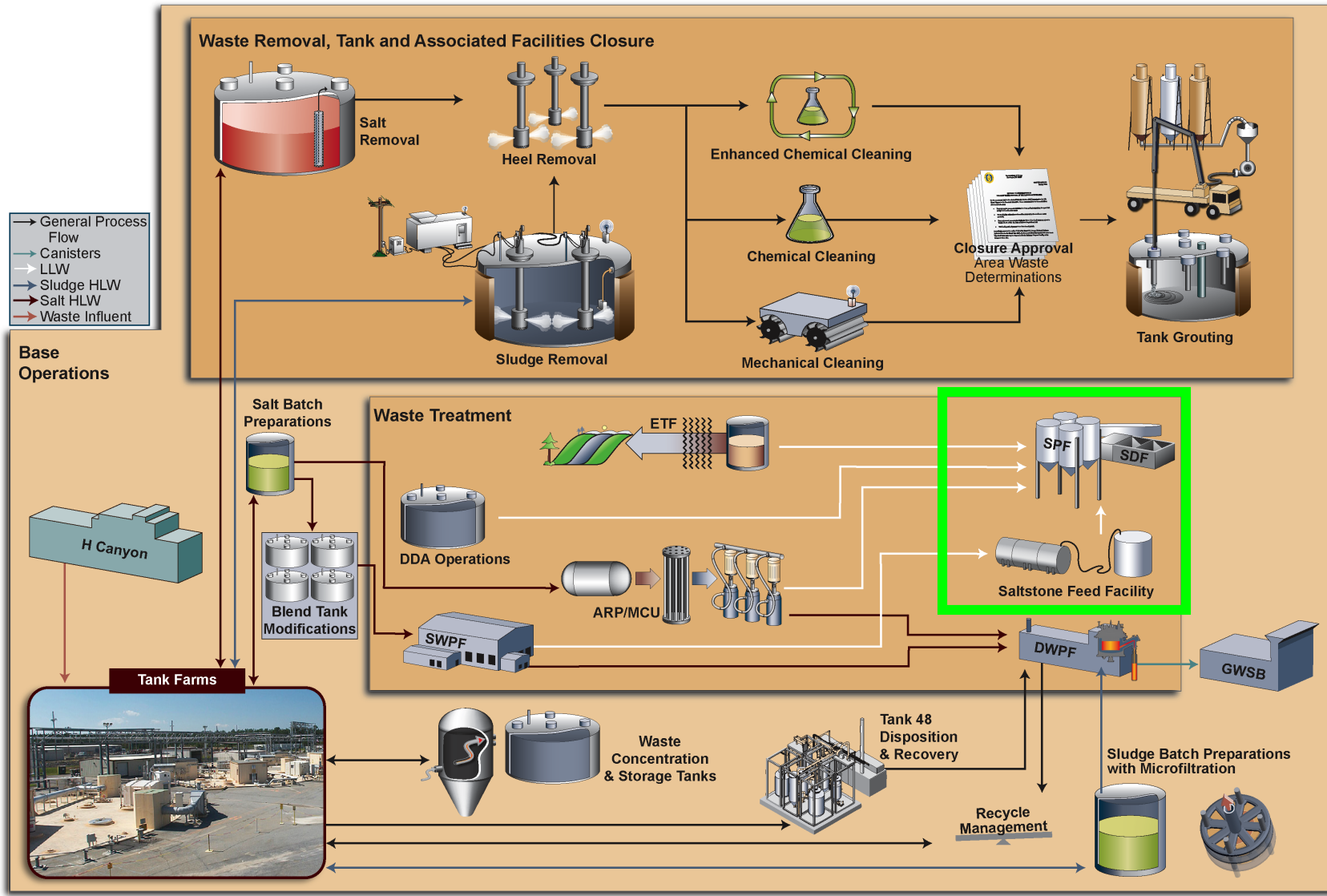
**Steve Wilkerson  
Waste Treatment Manager  
Savannah River Remediation**

**SRR-WTF-2010-00001**

- Position in the Liquid Waste Flowsheet
- Facility History
- Current Process Overview
- Recent Operations
- Future Mission Requirements
- Summary

ARP	Actinide Removal Process
DDA	Deliquification, Dissolution and Adjustment
DSS	Decontaminated Salt Solution
ETF	Effluent Treatment Facility
HTF	H Tank Farm
MCU	Modular Caustic Side Solvent Extraction Unit
SCIX	Small Column Ion Exchange
SWPF	Salt Waste Processing Facility

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## Key Events

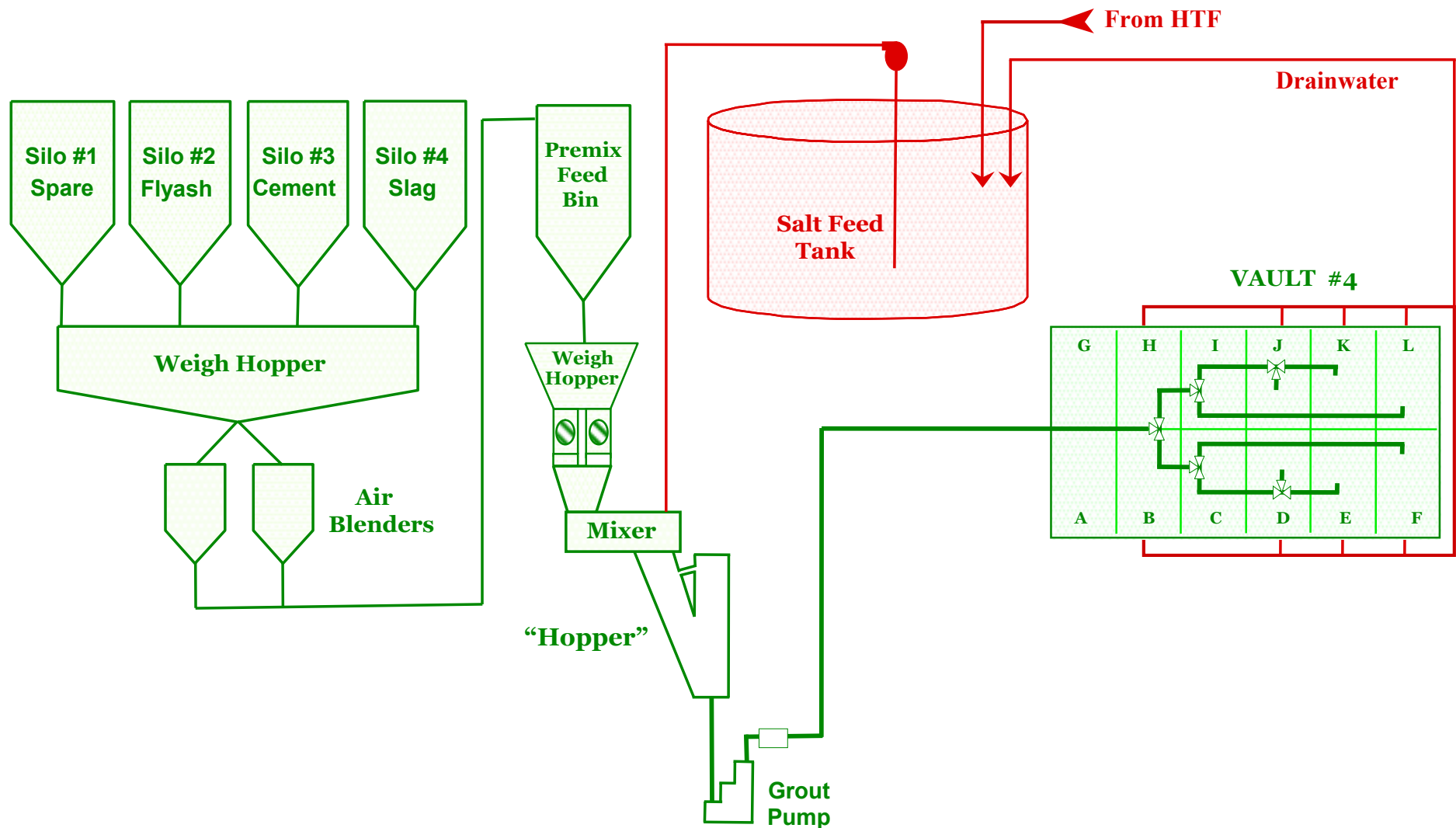
- Radioactive startup authorized in 1990.
- Modified in 2006 to support DDA and ARP/MCU campaigns.
  - Design Basis of 0.2 curie/gallon salt feed material

## Production Summary

- |                        |                |
|------------------------|----------------|
| • 1990 to June 2009    | ~8 M gallons   |
| • July 2009 to present | >1.2 M gallons |

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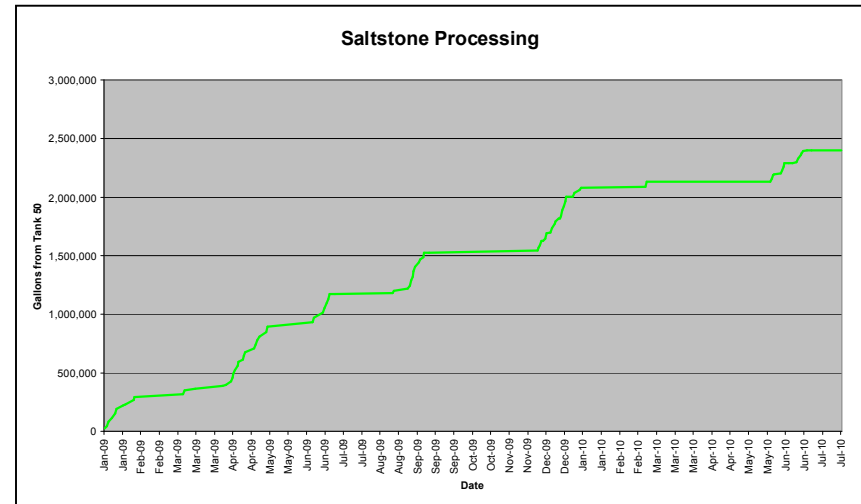
# Current Process Overview



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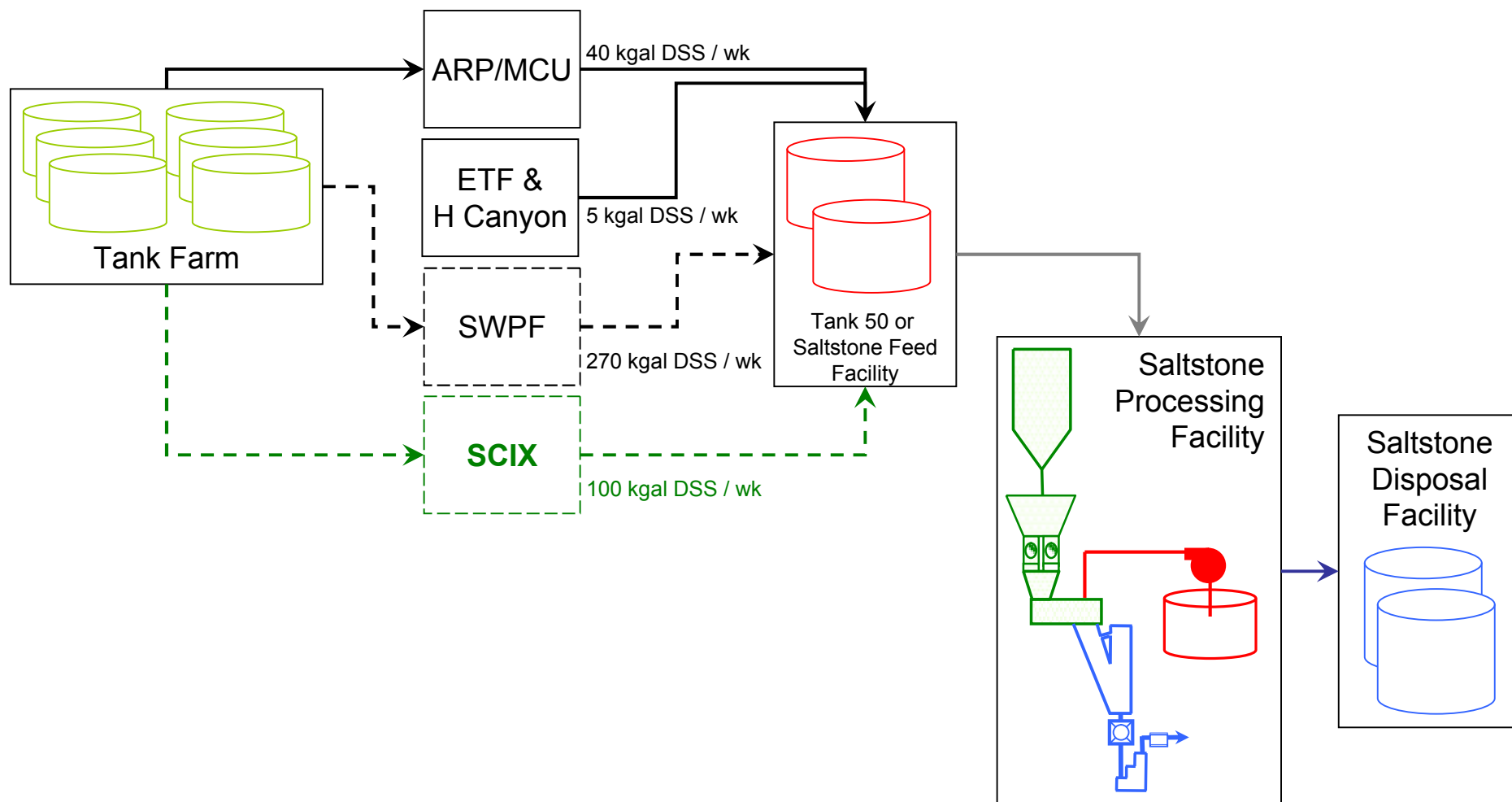
# Recent Operations

- Saltstone production has supported all mission requirements.
- Saltstone capacity greatly exceeds current requirements.
- Saltstone has experienced several extended outages (planned and unplanned) in the past year.
- Operational Improvement Plan has been developed to position the facility to support higher future throughput from SWPF and Supplemental Salt Processes.



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# Mission Requirements



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## Planned Improvements

- Performed comprehensive analysis of People, Plant, and Process Requirements to increase Availability, Reliability, and Attainment.
- Short Term
  - Redesign Grout Hopper
  - Implement 24 x 7 Operations
- Mid Term
  - Address Equipment Obsolescence
  - Improve Spare Equipment Availability
- Long Term
  - Enhance Process
    - Redundant Trains / Alternate Process Flowsheet
    - Safety Basis Control Optimization

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- Saltstone operations fulfills all mission requirements:
  - Workforce Safety
  - Process Safety
  - Environmental Stewardship
  - Life Cycle Objectives

