

Savannah River Site

Transuranic and Solid Waste Program Update

Presentation to the SRS Citizens Advisory Board
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Herbert (Bert) Crapse
Solid Waste Senior Program Manager
Department of Energy Savannah River Operations Office



Purpose

To satisfy Waste Management Committee Work Plan by:

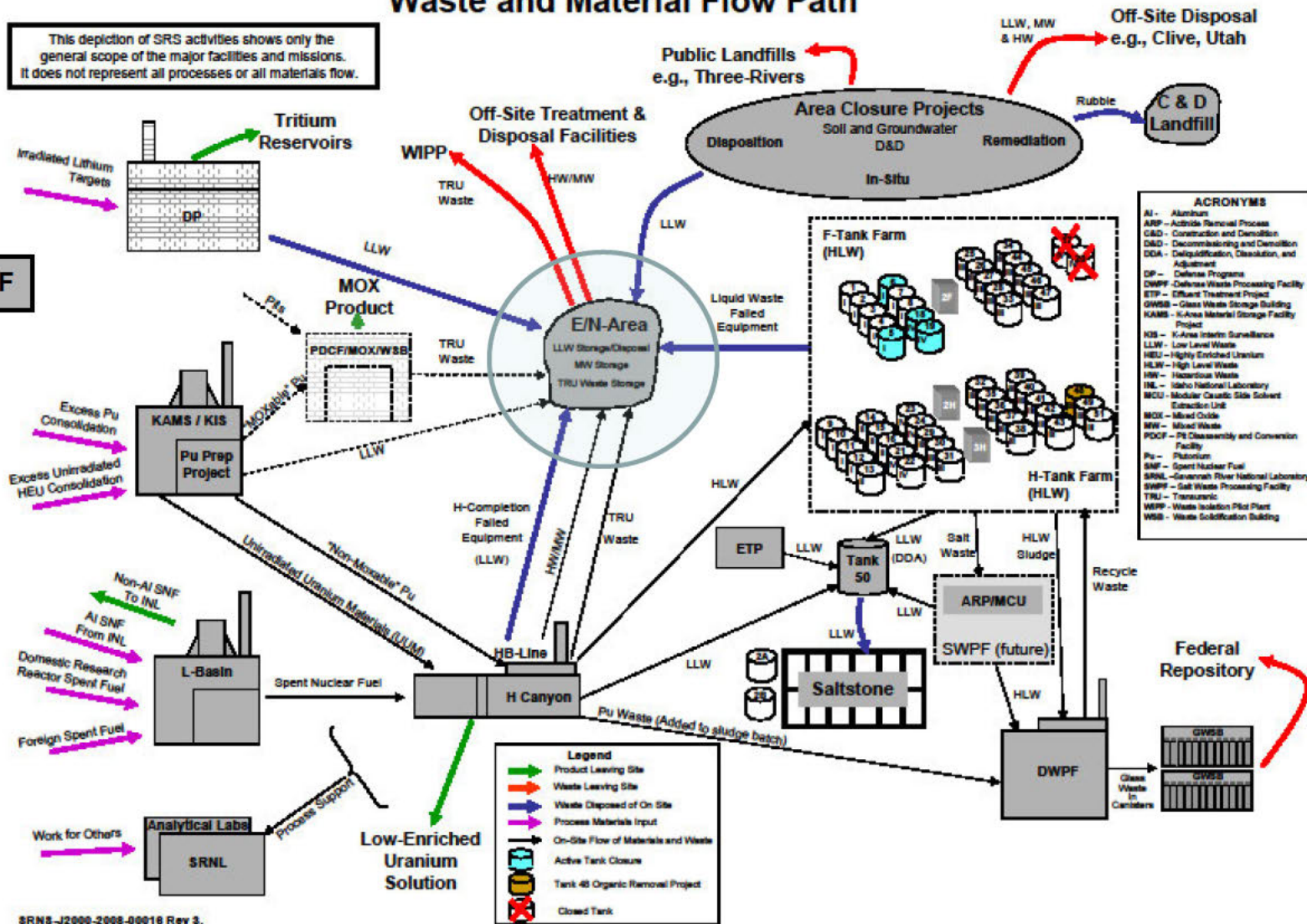
- 1) Providing update to CAB on the SRS Transuranic (TRU) Waste Program and Waste Isolation Pilot Plant (WIPP)**
- 2) Providing update on disposal activities for other Solid Waste streams**



Savannah River Site Waste and Material Flow Path

This depiction of SRS activities shows only the general scope of the major facilities and missions. It does not represent all processes or all materials flow.

235-F



SRNS-J2000-2008-00016 Rev 3.



SRS TRU Waste Program

- Definition - Radioactive waste that contains alpha-emitting radionuclides with an atomic number greater than 92 (uranium), half-lives greater than 20 years, in concentrations greater than 100nCi/g.
- Generated and managed from SRS operations since 1970s
- Requires off-site disposal at WIPP
- Stored legacy TRU waste at SRS peaked in 2002 at 12,000 cubic meters and 1.2 million curies
- Federal and State regulated



TRU Waste Disposal Success

- WIPP opened in 1999
- First SRS shipment to WIPP May 8, 2001
- 1,536 SRS shipments of TRU waste have been disposed at WIPP
- Approximately 12,000 cubic meters of legacy SRS TRU waste disposed to date



H- Canyon Box Remediation



Pictures of waste inside large boxes



TRUPACT-III



Back of open TRUPACT-III



Waste box on platform



TRUPACT-III Truck and Trailer



SRS Legacy TRU Waste Status

- 700 cubic meters of original volume remain to be disposed
- ~40 cubic meters left to remediate/repackage
- Remediation activities to be completed by 9/30/13
- WIPP characterization/certification to be completed in fiscal year (FY) 2014 if funding available
- Shipments to WIPP to be completed in FY 2015 if funding available



SRS Future TRU Waste Program

- Maintain WIPP certification and perform annual shipping campaigns to WIPP
- TRU waste generators include:
 - Non-MOX plutonium disposition
 - Future 235-F Deactivation
 - On going H-Canyon and Savannah River National Laboratory Operations
 - Future MOX operations



Solid Waste Disposition Update

Solid Waste Program Manages the Treatment, Storage, and Disposal of:

- **Transuranic (TRU) Waste**
- **Radioactive Low Level Waste (LLW),**
- **Mixed Low Level Waste (MLLW), and**
- **Hazardous Waste (HW),**



Low Level Waste Program

- Definition - Any radioactive waste not classified as High Level Waste, or Transuranic Waste. It does not contain chemically hazardous constituents.
- Waste generated from SRS operations, D&D, and environmental cleanup.
- Disposed on site (some exceptions).



LLW Disposal Trench



LLW Disposal Trench



Hazardous Waste (HW) and Mixed Low Level Waste (MLLW) Program

- Definition:
 - HW is any toxic, corrosive, reactive or ignitable material that could damage the environment or negatively affect human health according to the Resource Conservation and Recovery Act (RCRA.)
 - MW contains both radioactive and chemically hazardous constituents, as defined by RCRA.
- Generated from SRS operations, legacy TRU waste (MLLW), and environmental cleanup.
- Disposed off site.



MLLW waste boxes



FY 2013 Disposal Volume

LLW disposed to date	6,055 cubic meters
MLLW disposed to date	87.8 cubic meters
HW disposed to date	133.8 cubic feet



Summary

- Solid Waste Operations remain regulatory compliant and efficient
- Ongoing Low-Level, Mixed and Hazardous Waste operations keeping pace with SRS demands
- Completion of Legacy TRU waste disposition dependent on availability of FY 2014 funding

