

Savannah River Site

Transuranic and Solid Waste Program Update

Presentation to the SRS Citizens Advisory Board
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Purpose

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



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, excludes waste defined as Liquid Waste
- Generated from SRS operations since 1970
- Off-site disposal at the WIPP
- Nearly 12,000 cubic meters of legacy TRU waste in storage in 2002
- Some off-site received in 2003 through 2005
- Federal and State regulated



TRU Waste Disposal Success

- WIPP opened in 1999
- First SRS shipment to WIPP May 8, 2001
- 1,285 shipments of TRU waste have been disposed at WIPP
- Approximately 11,500 cubic meters of SRS TRU waste disposed to date



Box Remediation



Pictures of waste inside large boxes



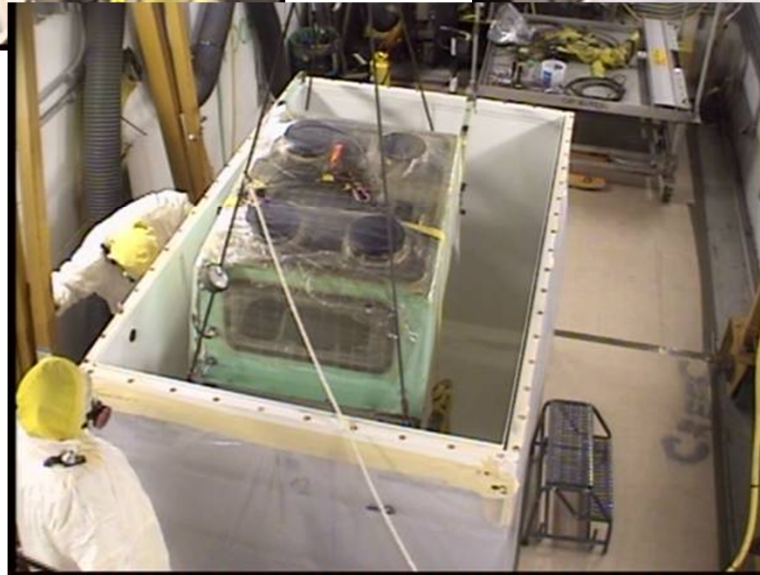
Box Remediation



Glove bag operation



Ten Drum Overpack



Glove box



TRUPACT-III



Back of open TRUPACT-III



Waste box on platform



TRUPACT-III Truck and Trailer



Legacy TRU Waste Status

- 2,300 cubic meters remain to be disposed
- ~600 cubic meters left to remediate/repackage
- Remediation activities to be completed by 12/30/12
- WIPP characterization/certification to be completed by spring 2012
- Shipments to WIPP to be completed by end of FY 2013
- Last 5,200 cubic meters funded by American Recovery and Reinvestment Act



Solid Waste Disposition Program

Manage the Treatment, Storage and Disposal of:

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



Low Level Waste Program

- Definition - Any radioactive waste not classified as Spent Nuclear Fuel, Liquid Waste, or Transuranic Waste. It does not contain chemically hazardous constituents.
- Waste generated from SRS operations, D&D, and environmental cleanup.
- Disposed on site.



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



Summary

- Solid Waste Operations remain regulatory compliant and efficient
- Ongoing Low-Level, Mixed and Hazardous Waste operations keeping pace with SRS demands
- Legacy TRU waste disposition on pace to be completed by FY 2013

