Savannah River Site

Transuranic and Solid Waste Program Update

Presentation to the SRS Citizens Advisory Board
Waste Management Committee
April 10, 2012

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1) Provide Update CAB on the SRS Transuranic (TRU) Waste Program and Waste Isolation Pilot Plant (WIPP)

2) Provide general disposal understanding for other Solid Waste streams

3) To fulfill 2012 Work Plan topic
Solid Waste Disposition Program

Manage the Treatment, Storage and Disposal of:
- Hazardous Waste (HW),
- Radioactive Low Level Waste (LLW),
- Transuranic Waste (TRU),
- Radioactive Mixed Low Level Waste (MLLW), and
- Sanitary Waste
Low Level Waste Program

- Waste generated from SRS operations, D&D, and Environmental Cleanup
- No legacy waste in storage
- On-site Disposal Facility

LLW Disposal Trench
Mixed Low Level Waste and Hazardous Waste Program

- Generated from SRS operations, legacy TRU waste (MLLW), and Environmental Cleanup
- Off site Disposal Facilities only

MLLW waste boxes
TRU Waste Disposal Program

- Generated from SRS operations since 1970
- Off-site Disposal at the WIPP
- 11,600 cubic meters legacy TRU waste inventory in 2002
- Some off-site received in 2003 through 2005
- Numerous CAB Recommendations and strong CAB support over the years that has contributed to the program success
TRU Waste Disposal Success

- WIPP opened in 1999
- First SRS shipment to WIPP May 8, 2001
- Effective regulatory framework strategy with South Carolina Department of Health and Environmental Control
- 1,285 shipments of TRU waste have been disposed at WIPP
- Approximately 2,700 cubic meters of legacy and newly generated TRU waste at SRS today
- Repackaging and/or remediating in four facilities and shipping at 4 trucks per week
Drum Remediation – F Canyon

Aerosol cans

Containerized Liquids

Visual Examination of Waste
Box Remediation – H Canyon

Four pictures of various waste inside large boxes
Box Remediation – F Canyon

Glove bag operation

Ten Drum Overpack

Glove box
Box Remediation – Cell 11

Waste in large box

Waste in large box

X-ray Monitor

X-ray Turn Table
TRUPACT-III Loading

Truck coming in bay

TRUPACT-III doors on rack

Back of TRUPACT_III and loading platform

Waste box on platform
Legacy TRU Waste Remaining

- Legacy TRU Inventory – 2,500 cubic meters
  - Last 5,200 cubic meters funded by American Recovery and Reinvestment Act
  - ~800 cubic meters left to remediate/repackage
  - Remediation completed by 12/30/12
  - WIPP Characterization/certification completed by March 2013
  - Shipments to WIPP completed by summer 2013
Summary

- Solid Waste Operations are regulatory compliant and efficient.
- Ongoing Low-Level, Mixed and Hazardous Waste operations keeping pace with SRS demands
- Legacy TRU waste disposition on pace to complete by March 2013.