



U.S. DEPARTMENT OF
ENERGY

Savannah River Site

Savannah River Site Citizens Advisory Board Waste Management Committee

TRU Waste Disposition

Presentation By

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A M E R I C A N R E C O V E R Y A N D R E I N V E S T M E N T A C T



Acronyms

ARRA	American Resource and Recovery Act
CAB	Citizens Advisory Board
DOE	Department of Energy
FY	Fiscal year
NDA	Non-Destructive Assay
NDE	Non-Destructive Examination
NRC	Nuclear Regulatory Commission
RCRA	Resource Conservation and Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SRS	Savannah River Site
SWB	Standard Waste Box
SLB	Standard Large Box
TRUPACT-III	Transuranic waste shipping container III
TRU	Transuranic
WIPP	Waste Isolation Pilot Plant





Purpose

- Provide update, as requested, by CAB Recommendation #258.
- Provide status of TRU Waste Disposition Project.





Agenda

- Definition of TRU waste
- SRS Inventory
- FY 2009 TRU Waste Activities and Status
- TRU Waste Scope and Plans under ARRA (Recovery Act) Funding





TRU Waste Definition

- Transuranic (TRU) waste is radioactive waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half lives greater than 20 years.
- SRS TRU waste is mainly debris type waste (i.e. construction debris, equipment, plastic suits, household waste products) that was generated in facilities that process/manage nuclear material at SRS.





Legacy TRU Waste Inventory

- 2,500 55-gallon drums
- 4,000 cubic meters of boxed waste (approximately 1,500 boxes)
- TRU Pad 1 Waste (1,000 containers)





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Drums in Storage



TRU Pad 1





Boxed TRU Waste





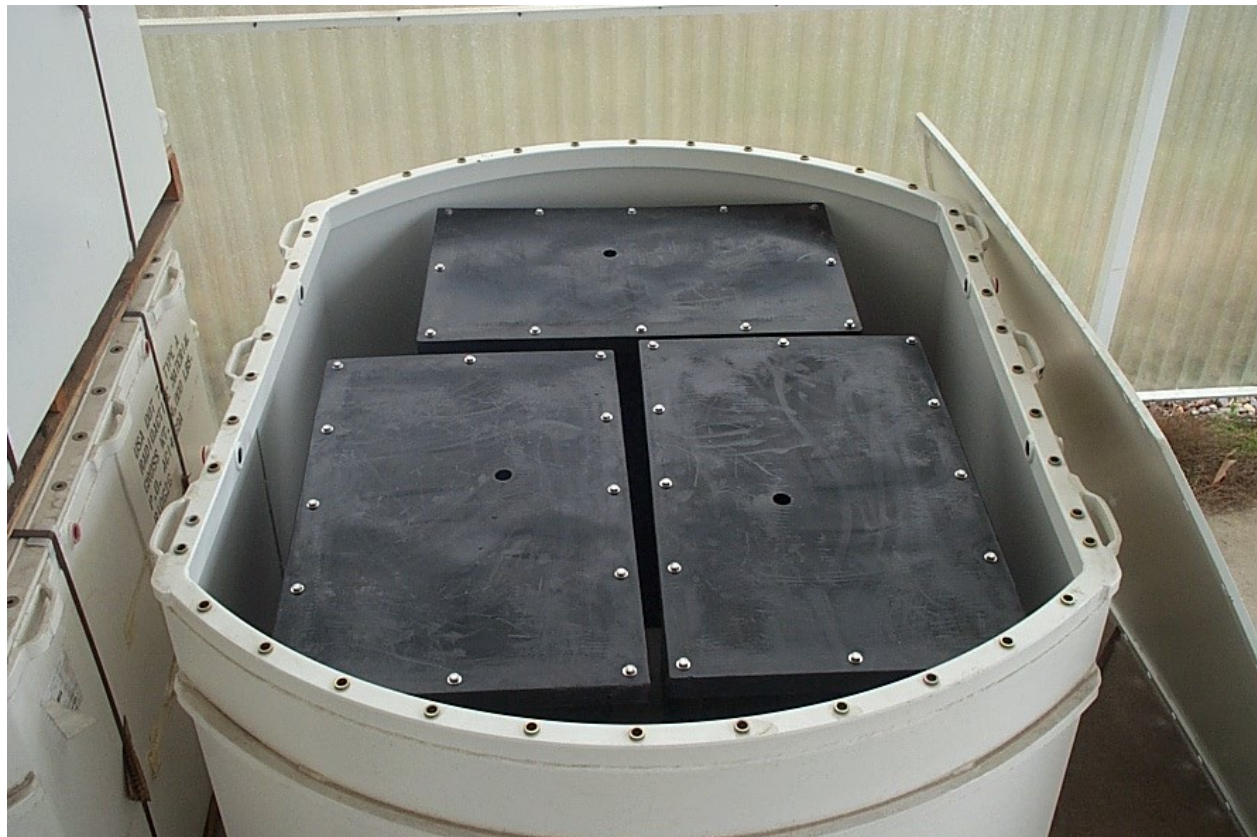
Planned FY09 TRU Waste Activities

- Ship 2,200 drums to WIPP.
- Complete RCRA closure of TRU Pads 7-13.
- Complete the Battelle-Columbus RH-TRU shipments
- Complete WIPP certification of large box NDA and NDE systems.
- Initiate TRUPACT-II shipments of Standard Waste Box.
- Unearth and initiate retrieval of waste from TRU Pad 1.



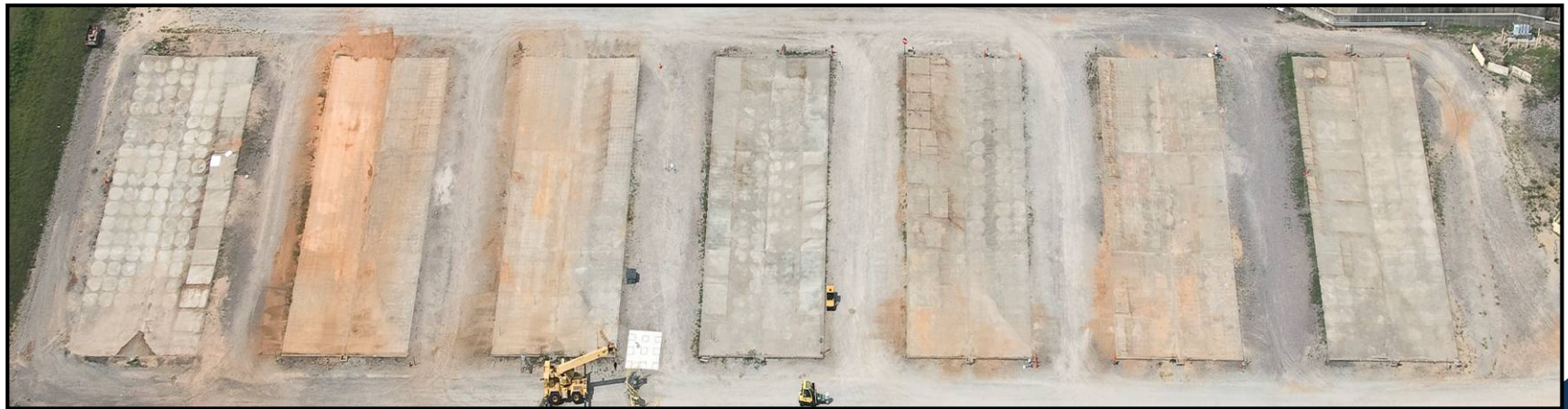


Standard waste box (SWB) with poly boxes





SRS TRU Pads 7 – 13
September, 2006 700+ Containers



SRS TRU Pads 7 – 13
July 31, 2008 All Containers Removed





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Battelle – Columbus RH-TRU shipments



Solid Waste Management
RH Shipment Team

First Shipment Leaving SRS
April 2009





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Large Box Certification Equipment



Large Box NDA Unit



Large Box NDE Unit





WIPP Shipments Update

- Making 3-5 shipments per week
- Averaging 250 drums per month
- 1st WIPP Shipment
May 8, 2001
- 1000th WIPP Shipment
June 2, 2009





TRU Recovery Act Funding Scope

Reduce the Solid Waste Footprint by 75%.

- Consolidate hazardous waste storage areas to E-Area.
- Disposition approximately 4,500 cubic meters of legacy TRU waste stored in E-Area which includes:
 - 1,500 miscellaneous boxed TRU waste containers.
 - 1,000+ TRU waste containers stored under earthen cover (TRU Pad 1) containing over 250,000 curies of Plutonium 238.





CAB Recommendation 258, June 2009

Progress Report

1. Ensure the SRS funding for FY 2009 is at a level that continues to address the highest risk reduction activities to complete the removal of all legacy TRU waste no later than FY 2013.
2. Provide a FY09 budget update to the CAB when it is known and assess the plans for disposition alternatives for all SRS legacy TRU waste with the goal of disposition of all waste by 2013.
3. The CAB requests that DOE-SRS provide an update to the Committee and the Board on the status of TRU Pad 1 disposition scope and schedule.
4. Provide assurances that efforts are in place to step up obtaining the NRC license for the TRUPACT-III; invite the NRC to brief the CAB on obtaining the necessary license; and inform the CAB about what it can do to assist in resolving technical issues with TRUPACT-III to ensure meeting the 2013 end date.
5. Define completion date of WIPP certification of large box NDA and NDE systems and invite Carlsbad (WIPP) to discuss and outline steps with the CAB Waste Management Committee and Board and the appropriate regulatory parties to resolve technical issues with large box NDE to ensure meeting the 2013 end date.





Project Funding and Risks

Appropriation	FY 2008	FY 2009	FY 2010
PBS 13	\$73M	\$62M (pre ARRA)	TBD
Line Item Project	0	0	0
Capital Project	0	0	0

Risks	Hiring of key personnel, NRC license of TRUPACT -III, and durability of large box NDE and NDE equipment.
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Summary and Path Forward

Status:

- Sufficient funding appears available to complete TRU disposition by 2013.
- Significant staffing increase has begun.
- Detail schedules and baseline being developed.

Near Term Challenges:

- Developing plans and obtaining personnel to implement tasks within ARRA window.
- Resolving technical challenges with TRUPACT-III license and WIPP large box certification program.

