

Citizens Advisory Board

Plutonium Consolidation Program Update

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**Nuclear Material Stabilization Project
Savannah River Operations Office**

July 27, 2009



Agenda

- Plutonium Consolidation Status
- Summary



Plutonium Consolidation

■ Scope

- Quantity: 12.8 Metric Tons (MTs)
- Material: Surplus, Non-Pit Plutonium-239
- Form: Solid form (metal, oxide powder, scrap, and unirradiated fuel)
- Stored in DOE Approved Containers (50 yr. storage)

■ Storage Location

- K-Area
- Existing Reactor Building and Vault-Type Room
- Meets 2005 Design Basis Threat Guidance
- Continuous Surveillance to Ensure Safe Storage



Plutonium Consolidation



3013 Container
(~30 lbs.)



9975 Shipping Container
(~400 lbs.)



Cross Sectional View of 9975 Shipping Container



Hanford Unirradiated Fuel Package



Plutonium Consolidation

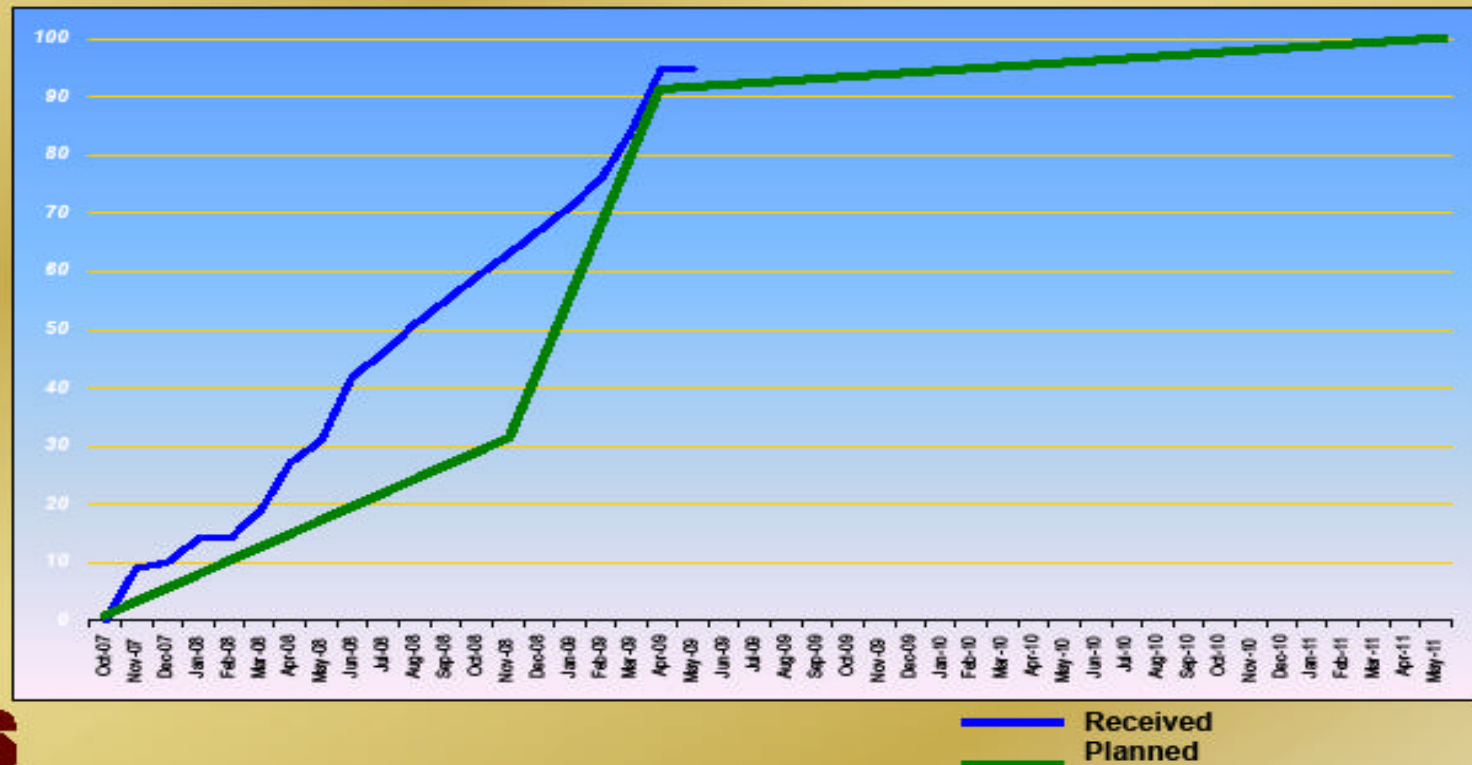
- Status – 96% Complete
- Shipping Sites
 - Savannah River – 910 containers (Complete)
 - Rocky Flats – 1889 containers (Complete)
 - Hanford – 2257 containers (Complete)
 - Hanford Unirradiated (HU) Fast Flux Test Facility Fuel – 13 HU Fuel Packages (ECD: 2009)
 - Lawrence Livermore National Laboratory – 115 containers (ECD: 2011)
 - Los Alamos National Laboratory – 96 containers (ECD: 2011)





EM Non-Pit Pu Consolidation Receipts

Percent of Containers



Note: Reflects campaign extension due to proposed LANL shipment schedule

Data Date 5/31/09



Plutonium Consolidation

- Potential Future Surplus, Non-Pit Plutonium Consolidation and Storage
 - LLNL and LANL – ~500 Containers
 - Part of the 12.8 MTs material
 - Pre-Conceptual Design for new Vault in K-Area (ECD: 2009)
 - Complete Future Consolidation, if approved (ECD: 2013)



Summary

- Plutonium Consolidation is approximately 96% complete with a Completion Date of FY2011/2013
- All plutonium is safely and securely stored in K-Area

