



***CH2M HILL B&W West Valley, LLC.***

**2013 February 27**

***EFCOG Waste Management Working Group***

***Jerry O'Leary  
Vice President  
Waste Operations***



**Waste Tank Farm Test  
Tower Demolition**

# Waste Shipping and Packaging Accomplishments

- Completed 5 of 12 legacy LLW and 2 of 4 legacy MLLW interim shipping milestones
- Total volume of legacy waste shipped since contract start:
  - 44,793 ft<sup>3</sup> LLW
  - 1,607 ft<sup>3</sup> MLLW
  - 120 ft<sup>3</sup> hazardous and universal waste
  - 976 ft<sup>3</sup> industrial waste



**Loading LLW Shipment in LSA 4**



**LLW Shipment to Nevada National Security Site**

# Waste Shipping and Packaging Accomplishments

- Repackaged and shipped all remaining legacy industrial and hazardous waste
- Initiated disposition of degraded LLW containers stored outdoors



**Unloading LLW Containers in LSA 3**



**Industrial/ Hazardous Waste  
Repackaging in LSA 4**



**Degrading Top of SP Box on  
LS 2 Hard Stand**

# Waste Shipping Accomplishments

- Total volume of newly generated waste shipped since contract start:
  - 4,846 ft<sup>3</sup> LLW
  - 110 ft<sup>3</sup> MLLW
  - 204 ft<sup>3</sup> hazardous and universal waste
  - 42,590 ft<sup>3</sup> industrial waste



**Waste Load Out of the Old Warehouse Pad**



**Preparing Intermodals for D&D Activities and Loading of Newly Generated LLW**

# Remote-Handled Transuranic (RH-TRU) Waste Processing

- Vitrification Submerged Bed Scrubber (SBS) size reduction and packaging completed
  - 17.4 m<sup>3</sup> RH TRUM component makes 0.6 m<sup>3</sup> RH TRUM packaged waste
  - Remainder packaged and shipped to NNSS
- Completed size reduction of approximately 90% of Dissolver 3C-2
  - Eleven Boxes of LLW surveyed and packaged, approximately 90% packaged as LLW



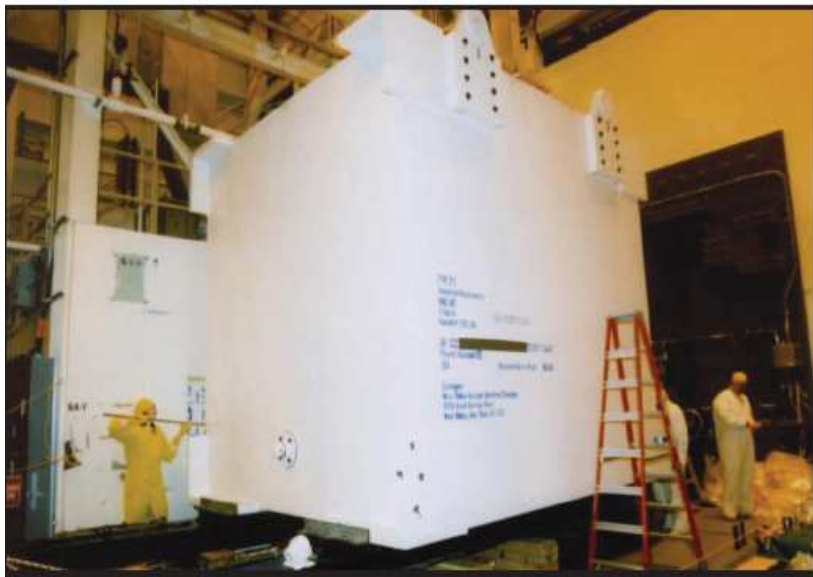
**Scrubber Vessel Solids Removal and Packaging (SBS)**



**Removing B 25 Box of Low Level Waste in Remote-Handled Waste Facility (RHWF) Load Out**

# Waste Incidental to Reprocessing (WIR) Processing Status

- Received WIR on Vitrification Melter, awaiting WIR on Concentrator Feed Makeup Tank (CFMT) and Makeup Feed Hold Tank (MFHT)
- WVDP WIR citation process (WV-929) proves to be effective means for LLW disposal



**Vitrification Melter Package**



**Vitrification, CFMT and MFHT  
Melter Package**

# Waste Management Challenges

- Characterization, size reduction and disposition of large components
  - CH TRU and RH-TRU oversize items
  - High dose containers
  - LLW and MLLW oversize debris
  - LLW Fuel Pool Resins
  - HLW tank pumps and components



**Packages for HLW Tank Pumps and Components**



**Spent Fuel Resins Packaged in Poly High Integrity Containers (HICs) Stored in Concrete SUREPAKS**



**Waste Storage Vaults Containing HLW Tank Pumps and Non-spec Packaging**

# Deactivation and Decommissioning Accomplishments

- Pre-demolition activity in the Main Plant Processing Building (MPPB) continues e.g. Lower Extraction Aisle and Chemical Operating Aisle
- Asbestos abatement in in the MPPB continues e.g. Cold Laboratory of Analytical Aisle
- Characterization of high-hazardous areas in the MPPB
- Pre-demolition activity in the Vitrification Facility continues
- Removed components containing hazardous constituents from Vitrification Facility aisles



**Drilling Tell-Tale in LXA/COA**



**Draining Piping in LXA/COA**



# Deactivation and Decommissioning Accomplishments

- Completed Deactivation of 01-14 Building
- Completed Step 1 of 3 Step demolition process of 01-14 Building
  - Step 1 waste disposed as industrial
- Initiated Step 2 demolition of 01-14 Building
  - Step 2 waste will be disposed as industrial
- Completed Balance of the Site (BOSF) demolition of:
  - Maintenance Storage Area
  - Product Storage Area
  - Old Warehouse and Counting Lab Slabs
  - Vehicle Repair Shop
  - Vitrification Test Facility Waste Area Slab
  - Vitrification Construction Fab Shop Slab
  - Waste Tank Farm Test Tower
  - All BOSF waste disposed as industrial



**Step 1 Demolition of 0-14 Building**



**Vitrification Fabrication Shop Slab Demolition**

# Deactivation and Decommissioning



**O-14 Building Off-Gas Cell Filter Removal**



**O-14 Building Processing Piping Removal Waste Dispensing Cell**



**Main Plant Processing Off-Gas Aisle Cleanout**



**Asbestos Removal Main Plant Processing Building**