



West Valley Demonstration Project
Project Update



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U.S. Department of Energy
West Valley Demonstration Project
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Safety Performance

Metric	January FY 2011	February 2012	CHBWV Goal FY 2012
Total Recordable Case (TRC)	0	0	≤ 2 recordables
Days Away, Restricted, or Transferred Case Rate (DART)	0	0	≤ 1 Days Away, Restricted, or Transferred Case
First Aid Cases	1	0	

CHBWV has worked 279,741 work hours without a lost-time work accident.
 WVDP has worked 4,279,741 million hours since last lost time accident.

Main Processing Plant Accomplishments

- Completed removal of instruments and tubing in the Upper Extraction Aisle (UXA)
- Initiated asbestos abatement in the Mass Spec Lab
- Documentation for 14 high hazard cells/areas reviewed for radiological characterization



Cleared UXA of instruments and tubing



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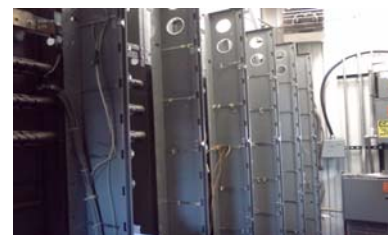
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O1-14 Building Accomplishments

Completed

- Asbestos sampling
- Electrical isolation of the main materials characterization center (MCC)
- Temporary power installation
- Preparations for ammonia tank removal
- Preparations for cutting access into waste dispensing cell



Electrical Isolation of Main MCC



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Site Operations Accomplishments

- New PSO Hub installed, wireless, and occupied
- 8D-4 Characterization Sampler built and readied for mock-up (now in progress)
- Vehicle repair shop (VRS) emptied, critical equipment relocated, and paper drafted for utility isolations



Emptied Vehicle Repair Shop



Tank 8D-4 Sampler/Mockup



HLW Canister Storage Accomplishments

- Mobilized and completed drilling for deep bore soil sampling for sub-surface soils characterization report for HLW interim canister storage area/pad
- Removed 14 drums and 2 lines from Chemical Process Cell (CPC)



Boring of Sub-Surface Soils



Waste Operations Accomplishments - Waste Shipping

- Shipped 33 trucks of Legacy LLW to National Nuclear Security Administration Nevada Operations
 - 40,000 ft³ since contract start
 - 6 months ahead of schedule
- Completed ALL legacy hazardous waste shipments and closed storage lockers
- ~161 ft³ of LLW liquid waste was disposed of onsite through the interceptor
- Shipped 623 cubic feet of low-level mixed waste (2 shipments)



Waste Containers Ready for Shipment



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Waste Operations Accomplishments - Waste Processing, continued

RHWF

- Processed Box12-4490-V at RHWF
 - The material was removed, size reduced, and packaged as TRU waste
 - 4 drums of TRU waste placed into Kistner box and moved to LAG storage

LAG Facility

- Drum crushing
- 6 B25 boxes have been generated



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Waste Operations Accomplishments - Vitrification Facility, continued

Process/package Submerged Bed Scrubber (SBS)

- Target completion by April 30
- Size reduction and packaging of miscellaneous materials
- Packaged 11 drums for removal
- Completed removal of 8 drums of waste from Vit Cell



BROKK cutting SBS



Plasma Arc Cutting



Brokk Sawing of SBS



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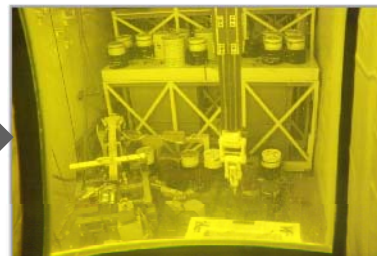
Waste Operations Accomplishments - Chemical Process Cell, continued

CPC Cleanup: Critical Path Activity

- Removed 145 ft³ of Remote-Handled/Contact Handled (RH/CH) TRU waste from Cell Building
- Relocated 9 RH-TRU Drums In-Cell



Contract Start



Current Condition of CPC after Relocation of Drum



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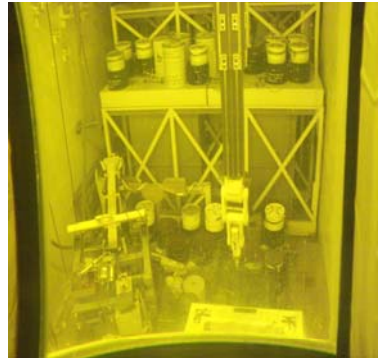
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Waste Operations Challenge – Remote Handled TRU Waste

- Debris from spent fuel head-end processing
- Dose up to 4,100 R/hr
- Fissile gram equivalent (FGE) as high as 4 kg
- Two drums may have intact fuel elements (Spent nuclear fuel)
- WVDP does not have a defense determination
- Contract specifies DOE N435.1 packaging instructions



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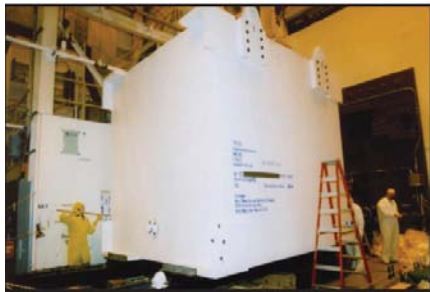
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Waste Operations Challenge HLW Melter (CFMT/MFHT), continued

- Waste Incidental to Reprocessing (WIR) Evaluation in place for the melter
- Not in Type B Casks (IP2)
- Melter not grouted (yet)
- Estimated melter shipping weight: ~380,000 lbs
- Exceeds standard allowable railway dimensions



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WVDP Look Ahead

- Continue to work safely and compliantly
- Select best proposal for HLW canister relocation storage system
- Complete packaging/removal of waste in the CPC
- Reduce site GSA fleet by three vehicles
- Canal dredging and engineering for dam repairs, design for NDA North Slope armoring, and wireless remote monitoring of dam areas
- Receive demolition equipment on site – April 15, 2012
 - Demolish WTF Test Tower, TSB Slab, Product Storage Area, and Hazardous Waste Lockers – June 30, 2012
- Process SBS – Target completion by April 30
- Department of Transportation exemption for the melter – Submittal May 31



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