

# West Valley Demonstration Project



## Project Update

Bryan Bower  
January 27, 2010  
West Valley Citizens Task Force Meeting



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## Safety Performance



*Newly-hired employees receive classroom and job-specific training prior to starting field activities*

- As of January 22, 2010, WVDP employees have worked more than **2.2 million hours** without a lost-time accident or illness!
- WVES-WVDP has the best employee safety record among DOE prime cleanup contractors
- DOE Voluntary Protection Program review for recertification



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## Project Update: Main Plant Process Building (MPPB)

- Extraction Cell-3 (XC-3)
  - Cell cleanout was completed in December 2009
- Head End Cells
  - Completed decontamination of the Process Mechanical Cell Crane and Power Manipulator and Crane Room



Separator being removed from XC-3



## Project Update: Main Plant Process Building (MPPB)

### ARRA Work

- Isolating and removing hazardous and asbestos-containing materials from steam lines and light fixtures
  - Over 300 linear feet of ACM-contaminated piping sampled, removed and packaged
  - Initiated cold and dark utility isolation conduit removal
- MPPB Decontamination
  - Acid Recovery Cell (ARC)
    - Completed decontamination
    - Cell walls painted to control loose contamination



Recovery Act: Accelerate work activities in the MPPB to accomplish removal of residual process vessels and piping from the facility by June 30, 2011



## Project Update: MPPB (cont)

### ARRA Work (continued)

- MPPB Decontamination
  - Liquid Waste Cell
    - First personnel entry into cell since 1971
    - Video taken to identify industrial hazards
    - Planning work to decontaminate the tanks (9) and fix contamination in preparation for pipe removal
  - General Plant - Control Room
    - Utility isolations and decommissioning continuing
    - Removal of instrumentation and control panels for size reduction and disposal



Liquid Waste Cell manned entry



Control Panel



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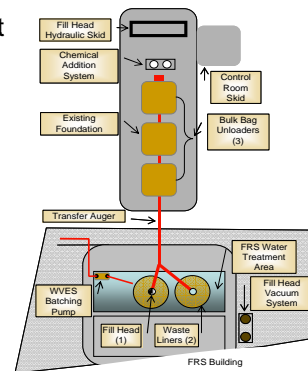
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## Project Update: Main Plant Liquids Solidification

### ARRA Work

- Sampled and analyzed liquids to be stabilized
- Placed subcontract for recipe development kicking off the laboratory recipe development
- Received quotes for dry ingredient supply system, with the technical review underway



Proposed MPPB Liquid Solidification System

Recovery Act: Solidify ~7,500 gallons of residual liquids from flushing the Liquid Waste Treatment System tank in the Main Plant (Tank 5D-15A1 in the Uranium Product Cell)



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## Project Update: Tank & Vault Drying

### ARRA Work

- A preliminary (70%) design review was conducted for the drying system
  - The system is scheduled for installation in 2010 to mitigate high moisture levels in the underground waste tanks and surrounding vaults
- Field activities were initiated to provide temporary ventilation to the tanks
- Completed mockup operations for the removal of highly contaminated ventilation piping from the Tank Farm

*Recovery Act: Design, install & operate the Tank and Vault Drying system in all 4 underground storage tanks and the 3 associated vaults by December 31, 2010*



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Installation of adaptor for T&VDS vent lines



Mock-up of cutting 8-inch ventilation line in glove bag

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## Project Update: Waste Processing

### ARRA Work

- Deployed a second waste processing crew to accelerate waste processing
  - New and experienced operators
- Completed facility upgrades to enable CH-TRU waste processing in two facilities
  - Waste Packaging Area (WPA)
  - Container Sorting and Packaging Facility (CSPF)

*Recovery Act: Accelerate processing of Contact Handled-Transuranic (CH-TRU) waste, legacy (stored) Low-Level Waste (LLW), and Mixed LLW (MLLW) for offsite disposal by December 31, 2010*



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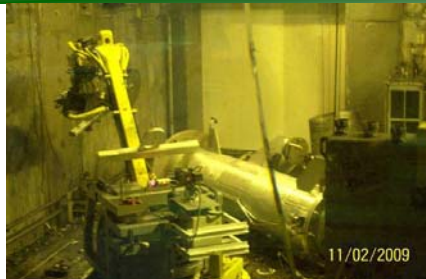
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## Project Update: Waste Processing (cont)

- As of December 31, 2009
  - Processed 71,421 ft<sup>3</sup> of legacy (stored) low-level waste (LLW) (*not* ARRA)
  - Processed 34,225 ft<sup>3</sup> of Transuranic waste
  - Disposed of 48,504 ft<sup>3</sup> of LLW

*Processing waste in two remote- and two contact-handled locations*



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## Project Update: Sr-90 Plume Mitigation



Trencher assembled



Trencher in operation



Bags of zeolite at the mine



Inspecting a zeolite after shipment

### ARRA Work

- 11/4/09 – conducted preliminary PTW design review with WVES, DOE, and DOE contractors
  - agreement reached to proceed with final design
- 11/10-11/09 – conducted test of one-pass trencher for installation of zeolite
  - checked shipping impact on zeolite with pre- and post-shipment samples
- 12/09 – completed WVES and DOE review of zeolite laboratory testing report
  - one test (column test) will continue through May 2010

*ARRA Activity: Install a permeable treatment wall to prevent further migration of the Strontium-90 groundwater plume.*



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## Project Update: Railroad Repair

- The rail line was fully restored to service in December of 2009



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## Ground Level Offices (GLO)

- 19 GLOs now occupied
  - 91 employees, including Rad Techs
- 51 units on site, 6 units waiting to be installed, 7 units to be ordered
- Project expected to be completed at the end of February
- Areas left empty:
  - Main Plant – 2<sup>nd</sup> and 3<sup>rd</sup> floors
  - Parts of the Administration Building



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## Phase 1 Decommissioning Plan

- The development of the Phase 1 Decommissioning Plan for the West Valley Demonstration Project occurred in several stages:
  - Revision 0 was submitted for NRC technical review on December 3, 2008
  - Revision 1, which incorporated additional information, was submitted to the NRC on March 16, 2009
  - NRC notified DOE on March 20, 2009, that it had completed its completeness review and the Phase Decommissioning Plan was suitable for NRC technical review
  - After its technical review NRC submitted a total of 44 RAI to the DOE on May 15, 2009
  - DOE responded to the NRC RAI in three separate submittals on August 13, 2009, September 16, 2009, and November 5, 2009
  - Revision 2, which incorporated the changes resulting from the responses to the NRC RAIs, was submitted to the NRC on December 18, 2009
  - It is expected that the NRC will transmit its Technical Evaluation Report (TER) to the DOE in mid-February 2010 and will be made available for public inspection



## Characterization Sampling and Analysis Plan

- The Characterization Sampling and Analysis Plan (CSAP) is a separate document from the Decommissioning Plan provides details about environmental data collection that will be taking place to support Phase 1 decommissioning activities described in the Phase 1 Decommissioning Plan for the West Valley Demonstration Project (Revision 2, December 2009)
- Submission to the NRC is anticipated to be in mid-February, 2010. There are four primary CSAP data collection purposes:
  1. Pre-design data collection,
  2. Remedial support,
  3. Post-remediation status documentation, and
  4. Phase 2 decision-making support
- Data collection to support these four main objectives is organized into two distinct data collection efforts
- DOE will post the CSAP to its website for public viewing



## Other News

- DOE solicitations
- 2011 budget



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