


<p>West Valley Demonstration Project  WVES LLC</p>	<h1>West Valley Demonstration Project</h1>
<p>West Valley Environmental Services</p> <p>July 27, 2011</p> <p>20135_1</p>	<h2>WVES Contract Accomplishments 2007-2011</h2> <p><b>Brent Rankin, Project Manager</b></p>

<p>West Valley Demonstration Project  WVES LLC</p>	<h2>Four-year Overview</h2>
	<ul style="list-style-type: none"><li>◆ Assisted the Department of Energy (DOE) in...<ul style="list-style-type: none"><li>— Developing a phased decision-making plan for West Valley Demonstration Project (WVDP) decommissioning, including interim actions (Way Ahead)</li></ul></li><li>◆ Supported the DOE in preparing and finalizing the...<ul style="list-style-type: none"><li>— Environmental Impact Statement for Decommissioning and/or Long Term Stewardship at the WVDP and Western New York Nuclear Service Center, and</li><li>— Phase I Decommissioning Plan for the WVDP</li></ul></li></ul> <p>20135_2</p>



# Four-year Overview

WVES LLC

- ◆ Safe operations and management of the WVDP site to:
  - Prepare the Main Plant for demolition
    - Conduct dismantlement activities in high hazard areas
    - Remove asbestos-containing materials (ACM) from accessible areas
    - Infrastructure reduction activities
  - Process and ship legacy waste for off site disposal
  - Install mitigative measures for effective control of ground and surface water in site facilities
    - Design and install North Plateau Groundwater Plume Permeable Treatment Wall
    - Design and install Waste Tank and Vault Drying System
    - Design and install Cover and Wall for NRC-licensed Disposal Area
  - Prepare a conceptual design and siting evaluation for on-site HLW canister storage



# Safety

WVES LLC

- ◆ No lost-time injuries or illnesses during contract period
  - WVDP has best safety rating in the DOE complex
- ◆ Recognized by DOE and URS Corporation for commitment to workplace safety
  - DOE VPP Star site
  - URS Safe Site of the Year 2009
  - 3 URS President's Awards for Safety



Employee Recognition



Corporate Sponsorship



Employee Involvement



WVES LLC

## Main Plant Activities

- ◆ ~6 miles of piping and over 50 tons of vessels and equipment removed from predominantly high hazard areas
  - Miniature Cell – ✓ completed
  - Acid Recovery Cell – ✓ completed
  - Hot Acid Cell – ✓ completed
  - Sample Cells and Pump Niches – ✓ completed
  - Off-Gas Cell
    - 9 of 13 vessels removed
  - Extraction Cell-1
    - 7 of 8 liners of pipe debris removed from cell
    - 3 major vessels removed and packaged



Vessel Removal



Equipment installation



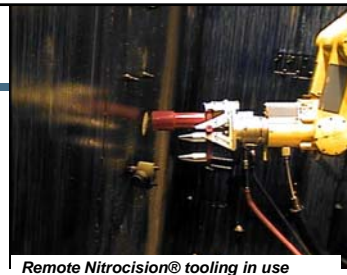
Vessel Removal



WVES LLC

## Main Plant Activities

- ◆ Head End Cells
  - Successfully deployed remote delivery system for liquid nitrogen decontamination in Process Mechanical Cell and General Purpose Cell
    - First-of-its-kind remote deployment of liquid nitrogen decontamination tooling



Remote Nitrocision® tooling in use





# Main Plant Activities

WVES LLC

- ◆ Prepared ancillary areas for facility demolition
  - Removed accessible asbestos
    - 5,500 linear feet of piping
    - ~1,700 square feet of non-friable and friable asbestos
  - Dismantled and decontaminated
    - 15 extraction cell pump niches
    - Crane rooms
    - Control Room



ACM Removal



Control Room Cleanout

01/20/2010



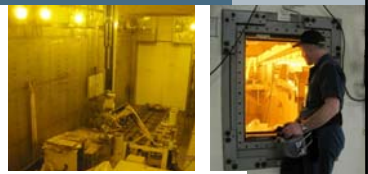
Pump Niche Decontamination



# Waste Processing Activities

WVES LLC

- ◆ Used multiple contact and remote waste processing areas
  - 100% of legacy low-level waste processed
  - ~95% of suspect transuranic (TRU) waste processed
- ◆ Shipped 171,000 cubic feet of LLW



Remote Waste Processing



Contact-handled Waste Processing





## Permeable Treatment Wall

### WVES LLC

- ◆ Characterized the leading edge of the Sr-90 groundwater plume
- ◆ Conducted more than one year of laboratory testing of zeolite
- ◆ PTW installed in Oct-Nov 2010
  - 860 ft. long, 19-30 ft. long, 39 in. wide
  - 2,372 metric tons of zeolite
- ◆ Preliminary analysis indicates groundwater is flowing through the wall as expected and that the zeolite is removing strontium-90 as planned



Zeolite staging and placement



Groundwater monitoring



## Tank & Vault Drying System

### WVES LLC

- ◆ T&VDS operation for ~6 months and has evaporated ~50% of the liquids in the tanks
- ◆ Key system installation activities
  - Excavated and removed existing ventilation ductwork in Waste Tank Farm and replaced with new, stainless steel ductwork
  - Installed rotary drier
  - System operational on Dec 31, 2010



04/29/2010 22:59  
New ductwork and drier





# NDA Cover and Wall

- ◆ Reduced water infiltration into NRC-licensed Disposal Area
  - Installed geomembrane cover over 7-acre disposal area
  - Installed up-gradient wall to prevent lateral groundwater infiltration into the disposal area
  - Water collected from NDA has been reduced by ~80%



Wall and cover installation



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# Community Involvement

- ◆ Proud supporter of community-based programs
  - Food Drive
    - 266,000 pounds of food donated in past four years
  - United Way
    - \$151,000 in donations
  - Day of Caring
    - Completed several community improvement projects
  - Chambers of Commerce
    - Active member of West Valley and Springville Chamber of Commerce
  - Corporate Challenge
    - WVDP team participation



Food Drive



School Program Support



United Way



Day of Caring



## Ongoing Activities Through August

- ◆ Main Plant
  - Off-Gas Cell
  - Extraction Cell-1
  - ACM Removal
- ◆ Waste Processing and Disposal
  - TRU waste processing
  - LLW shipments
- ◆ General site-wide cleanup
- ◆ Preparing for contract turnover

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## Thank You

WVES company roots go back to the Westinghouse Electric Company – selected by DOE in 1981 as the first prime contractor at the WVDP

**On behalf of all those who have had the opportunity to work on this important project ...**

***Thank you!***



**WVNSCO**  
West Valley Nuclear Services Company



WVES LLC

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