 U.S. DEPARTMENT OF **ENERGY** | OFFICE OF ENVIRONMENTAL MANAGEMENT

## CHBWV Project Update

### Citizen Task Force

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CH2M HILL B&W West Valley, LLC

September 24, 2014

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## Safety Share



### 1 Million Safe Work Hours without a Lost Time Accident

- 48,000 work hours per month
- More than 20 months
- Achieved August 11, 2014

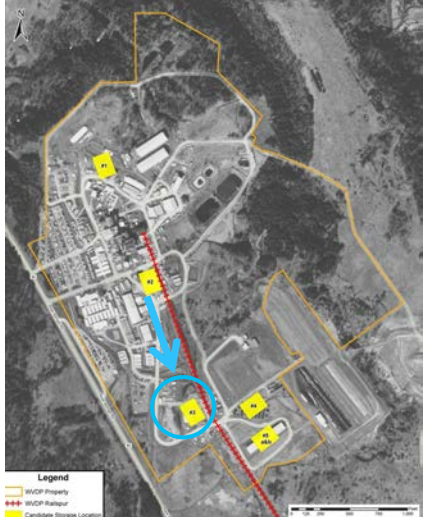


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## Milestone 1 – HLW Canister Relocation & Storage Project

- Relocate high level waste from interim storage in the Main Process Plant Building to a stand-alone dry cask storage system:
  - 275 HLW canisters
  - 2 Evacuated canisters
  - 1 Non-routine HLW canister
  - 2 Miscellaneous debris drums



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## Milestone 1 - High Level Waste Relocation and Storage Progress



8 Vertical Storage Casks (VSCs) Completed; 8 more being fabricated in September



Main Pad	Approach Apron
<ul style="list-style-type: none"> <li>144 feet by 110 feet by 3-feet thick</li> <li>133 tons of reinforcing steel</li> <li>1,800 cubic yards of concrete</li> </ul>	<ul style="list-style-type: none"> <li>98 feet by 170 feet by 18-inch thick</li> <li>110 tons of reinforcing steel</li> <li>935 cubic yards of concrete</li> </ul>



8 Overpacks Completed  
8 In-process

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### Milestone 1 - In-Facility Canister Removal Pathway

**Low-Profile Rail Cart (75%)  
December Delivery**

Modifications continue in the Equipment Decontamination Room, Chemical Process Cell, and Load-In Facility to accommodate the transport of the canisters from the Main Plant Process Building

**TL220 Transporter  
100% Fabrication Complete  
September Delivery**

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### Milestone 1 - HLW Storage System Progress

**GT-50 Tugger – On Site and Tested**

**Vertical Cask Transporter  
On Site and Being Tested**


**Automatic Welding System  
September Delivery**

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## Haul Road Upgrades



- Complete upgrades to 1,400 feet of site roadway

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## Milestone 2 - Waste Operations

### Legacy Waste Disposition Status through August 2014 – No Changes from July

- Approximately 140,000 ft<sup>3</sup> in storage at start of contract
- Processed and shipped ~77,000 ft<sup>3</sup> for disposal to date
  - LLW: 53% complete (70,842 ft<sup>3</sup>)
  - MLLW: 79% complete (5,000 ft<sup>3</sup>)
  - Industrial: 100% complete (984 ft<sup>3</sup>)
  - Hazardous: 100% complete (163 ft<sup>3</sup>)
  - 84 shipments to date



Loading Degraded SR Box into an IP-2 Container



Rigging Degraded SR Box for Loading into an IP-2 Container

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## Milestone 2 - Waste Operations, cont.

Shipment of Vitrification Melter, Concentrator Feed Make-up Tank (CFMT) and Makeup Feed Hold Tank (MFHT)

- CHBWV continues to work with Savannah River Nuclear Solutions, Savannah River National Lab (SRNL) to prepare an NRC application for a special authorization
- Work continues between CHBWV and Department of Transportation (DOT) on the correct categorization of the CFMT and MFHT containers



Melter Grouting Operations



Melter Grouting Operations

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## Milestone 3 – Facility Disposition

Main Plant Process Building (MPPB) Deactivation

- Liquid Waste Cell (LWC) – Tank 13D-8 and 13D-7 decontamination complete; core bore for hatches
- Plant Office – Asbestos-Containing Material (ACM) removal – shower area and utility closet
- Off-Gas Trench – Pipe removal from east/west section
- Analytical Aisle – Sample Storage Cell (SSC) decontamination
- Extraction Cell (XC)-1 – Mockup – Wachs’ Saw and decontamination equipment
- Off-Gas Cell (OGC) – Portable Ventilation Unit (PVU) preparations



Off-Gas Trench Pipe Removal



Decon of Tank 13D-8 in LWC

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## Milestone 3 – Facility Disposition, cont.

### Vitrification Facility Deactivation

- Vitrification Cell – Perform washdown of Cell East and North Wall, Lock Out/Tag Out, penetration covers, and manipulator repairs

Manipulator Replacement

Vitrification Cell Gross Decon

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## Milestone 4 – Nuclear Operations and Storage

### Newly Generated Waste Disposition Status through August 2014

- Contract-to-date shipping status through August 2014
  - Industrial Waste: 150,546 ft<sup>3</sup>
  - Hazardous/Universal Waste: 648 ft<sup>3</sup>
  - LLW: 114,933 ft<sup>3</sup>
  - MLLW: 991 ft<sup>3</sup>
  - 195 Balance of Site Facilities (BOSF) Shipments

08/04/2014

Dispositioning Legacy Containers Near the HLW Pad

08/04/2014

Dispositioning Legacy Containers near the HLW Pad

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## Milestone 4 - Nuclear Operations and Storage, cont.

**Lake 1 Spillway Repairs**



Recontouring of Side Slopes of Lake 1 Spillway and Placement of Topsoil and Enkamat



Placement of Enkamat, Seeding and Hydro-Mulching on Lake 1 Spillway



Installation of Drainage Swale in Lake 1 Borrow Area



Placement of Topsoil, Enkamat, Seeding and Hydro-Mulching on Lake 1 Spillway

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## Milestone 4 - Nuclear Operations and Storage, cont.

**Lake 2 Dam Repairs**

- Initiated repairs following permit approval of Lake 2 repairs from the New York State Department of Environmental Conservation Division of Dams and Army Corps of Engineers



Starting Repairs at Base of Lake 2 Dam



Recontouring and Repair of Lake 2 Dam Face and Groin Drain



Recontouring and Repair of Lake 2 Dam Face and Groin Drain

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## Milestone 4 - Nuclear Operations and Storage, cont.

### Well Installation

- Completed all field work and sampling of the water wells
  - Received approval from Cattaraugus County to perform a final tie-in to place the wells in service



Completed Well 1 Showing Electrical and Wireless Panel



Completed Wells 1 and 2







Water Wells 1 and 2 Tie-in in the Utility Room

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## Aerial Survey to Measure Radiation

- National Security Technologies, LLC (NSTec) (Contractor to Department of Energy's National Nuclear Security Administration) will perform aerial surveys to measure radiation.
- Aerial surveys are scheduled September 22 through October 8, weather dependent.
- A Bell-412 helicopter equipped with radiation detection instruments will fly approximately 150 feet above the ground at 80 mph over the survey area.
- Results will be provided at a 2015 Quarterly Public Meeting.

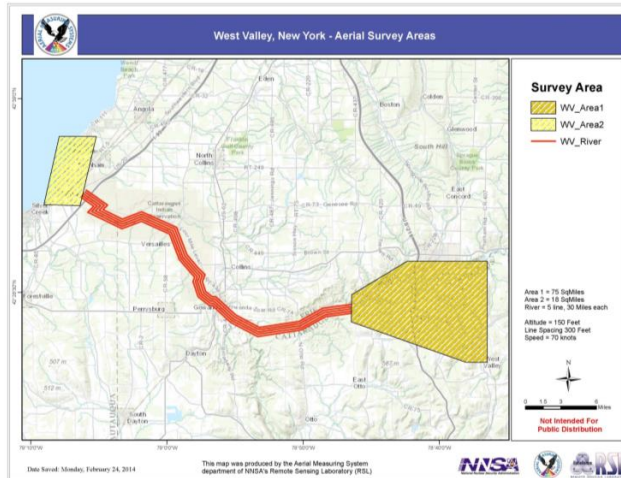





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# Aerial Survey Area

- WVDP site
- The Western New York Nuclear Service Center, approximately 3,300 acres
- Cattaraugus Creek from Springville to Lake Erie, including portions of the Villages of Gowanda and Silver Creek, Cattaraugus Territory of the Seneca Nation of Indians, and
- Portions of Cattaraugus, Chautauqua and Erie Counties.



## QUESTIONS?