



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

West Valley Demonstration Project Waste Management Update

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**104 Roundtable: Waste Management Energy Facilities Contractor Operating Group
(EFCOG)
March 6, 2014**

HLW Relocation Schedule

Major Tasks	Projected Date
<p>Construct Storage Pad</p> <ul style="list-style-type: none"> • Pad and apron concrete placements completed December 2013 • Demobilization completed January 2014 • Final activities for removing Storm Water Pollution Prevention Controls schedule April 2014 	<p>April 2014</p>
<p>Obtain DSA Approval (DOE Safety Evaluation Report)</p>	<p>Complete (January 2014)</p>
<p>Obtain NRC Certificate of Compliance (CoC) for Shipping HLW</p>	<p>November 2014</p>
<p>Approved Start of Transfers (Operations)</p>	<p>March 2015</p>
<p>Complete Relocation of Canisters</p>	<p>February 2017</p>

Similar to the storage of commercial spent nuclear fuel, HLW canisters will be placed into stainless steel overpacks, which in turn are stored in steel reinforced, concrete storage casks

- 5 HLW canisters per overpack/cask



HLW Canisters Stored in MPPB



5 Canister
Overpack &
Cask



Typical Cask Storage
Facility

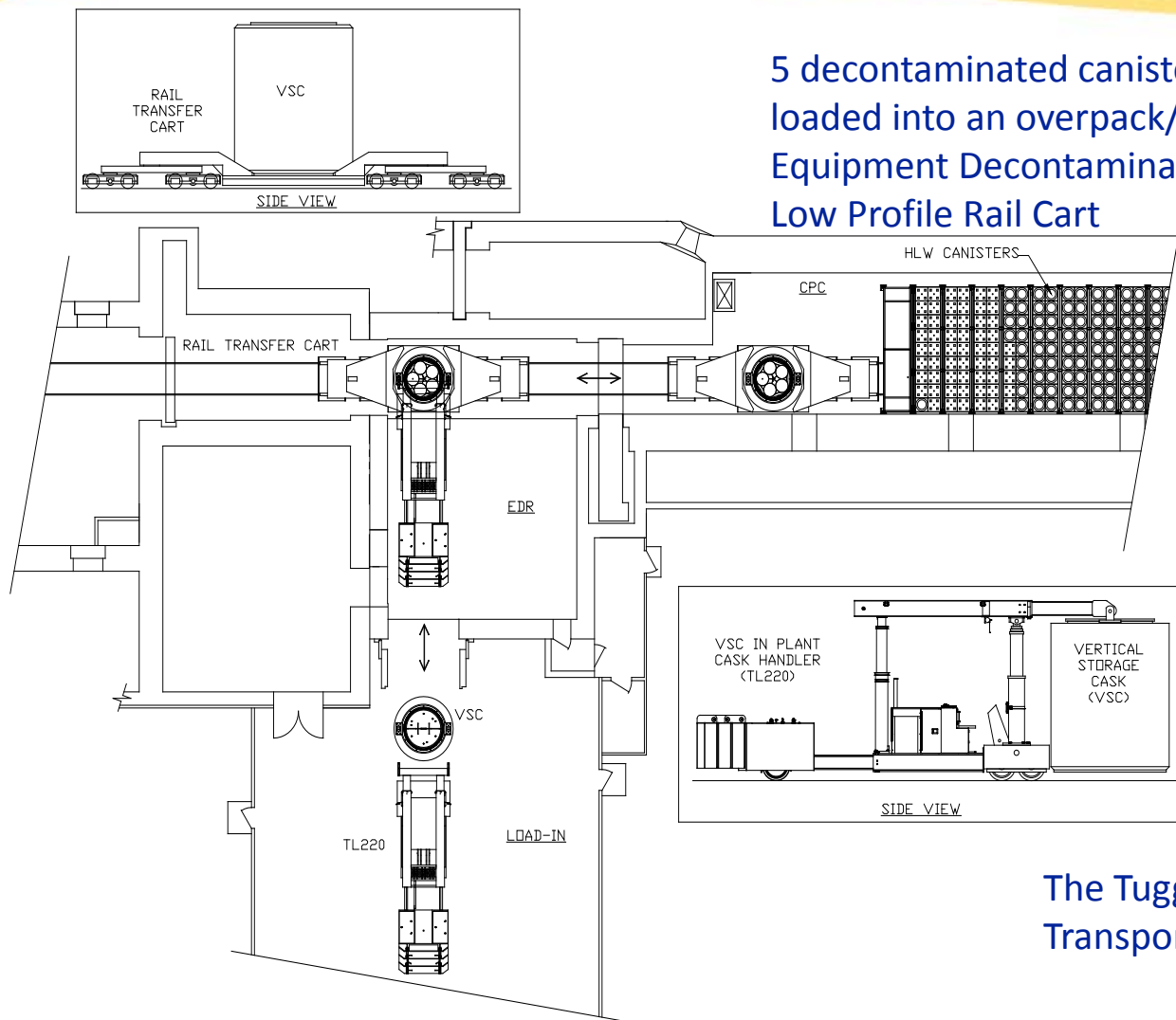


Overpack
Transfer (Future)



Typical Shipping Cask

HLW Relocation, cont.



5 decontaminated canisters of vitrified HLW will be loaded into an overpack/cask and moved into the Equipment Decontamination Room (EDR) on the Low Profile Rail Cart

In the EDR:

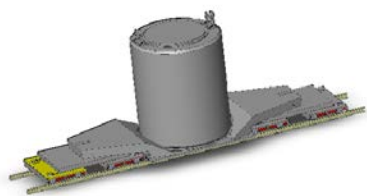
- Temporary lid placed
- In Facility Cask Transporter moves the cask from the EDR to the Load-in Facility

In Load-In:

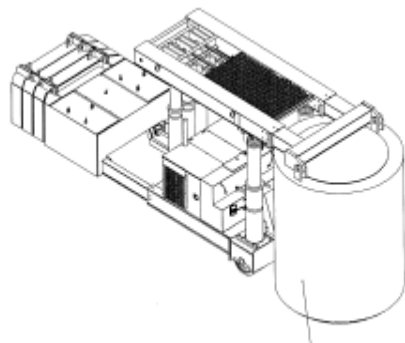
- Stainless steel lid welded onto overpack
- Cask lid bolted onto cask
- Cask loaded onto Vertical Cask Transporter

The Tugger will pull the Vertical Cask Transporter to the HLW storage pad

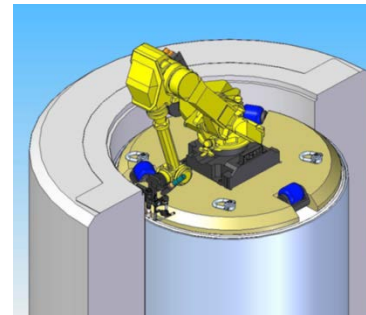
HLW Relocation Major Equipment



Low Profile Rail Cart –
November 2014
Delivery



In Facility Cask Transporter
(TL220) – Sept 2014 Delivery



Overpack Welding System –
April 2014 Delivery



Outside Vertical Cask Transporter (A
Frame) – June 2014 Delivery



GT-50 Tugger –Delivered in December 2013

Constructed the HLW Storage Pad



HLW Storage Pad

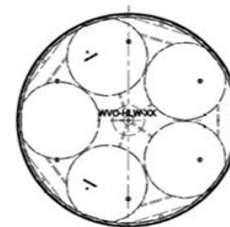
144 feet by 110 feet by 3-foot-thick
133 tons of reinforcing steel,
1,800 cubic yards of concrete

Approach Apron

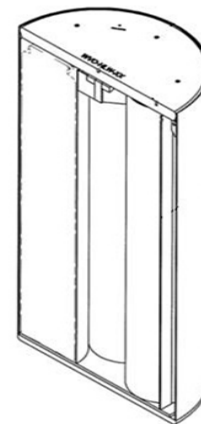
98 feet by 170 feet by 18-inch thick
110 tons of reinforcing steel,
935 cubic yards of concrete



Constructed 8 Vertical
Storage Casks (VSCs);
8 more Ordered

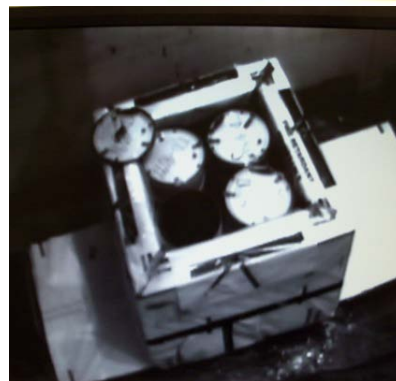


8 HLW Overpacks
Being Fabricated



Legacy Low-Level (LLW) and Mixed LLW (MLLW) Processing and Disposition

- Removing first group of Remote-Handled (RH) transuranic (TRU) waste drums from the High Level Waste Interim Storage Facility (HLWISF)
 - 60 of the 80 drums placed in overpack containers to date
 - Packaged drums relocated to Chemical Process Cell Waste Storage Area (CPCWSA)
- Waste Processing Area (WPA) Phase I processing campaign is 100% complete
 - 488 containers processed
- Inventory Management
 - Moved all Kistner boxes containing TRU waste into CPC-WSA for indoor storage



Remote TRU Drum Removal From HLWISF



Packaged TRU Drums in CPCWSA Storage

Transuranic (TRU) Waste

- Completed pre-decisional report evaluating options to manage RH- TRU waste and non-high level waste drums located in the CPC

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

- Completed grouting operations
- Awarded transportation contract to MHF Services
- Planning shipment to Waste Control Specialists LLC (WCS) for disposal

Nevada National Security Site

- Completed Annual Independent Self-Assessment with no findings
- NNSA Audit corrective action completed

Received WCS waste acceptance certification



Waste Operations Schedule

Major Tasks	Projected Date
Complete 3 regulatory shipments	June 2014
Complete final TRU Waste Disposition Plan	June 2014
Complete shipment of vitrification melter and components to Waste Control Specialists (TX)	November 2014

Continued deactivation and cleanout of Main Plant Process Building (MPPB) and Vitrification Facility

- Completed deactivation of Upper Warm Aisle
- Completed asbestos abatement of Plant Office Building – 2nd & 3rd floor
- Miscellaneous equipment, materials and debris removed from Vit Cell
- Planning to solidify plant liquids for transportation to a facility for treatment and disposal



Upper Warm Aisle after Deactivation



Vit Cell Cleanout Continues

Facility Disposition Schedule

Major Tasks	Projected Date
Complete isolation of utility lines in MPPB analytical aisle	March 2014
Complete asbestos abatement in MPPB office building	June 2014
Complete gross decontamination of Vitrification Facility hot cell	September 2014
Complete MPPB Liquid Waste Cell deactivation	June 2015