West Valley Demonstration Project (WVDP)

EFCOG Waste Management Working Group

September 3, 2013
WVDP Waste Operations Accomplishments

Legacy Waste Disposition

- LLW/MLLW Repackaging
  - Completed 252 drums and 76 B-25 Boxes (out of 484 containers)
- LLW/MLLW Shipped
  - 62,055 ft$^3$ of LLW Contract to Date
  - 1,615 ft$^3$ of MLLW Contract to Date
- Industrial and Hazardous Waste Shipments
  - 120 ft$^3$ Hazardous
  - 976 ft$^3$ Industrial
# Legacy Waste Shipping Status

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<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>No. of Shipments</td>
<td>Volume (ft³)</td>
</tr>
<tr>
<td>LLW</td>
<td>158</td>
<td>132,666</td>
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<tr>
<td>MLLW</td>
<td>9</td>
<td>6,344</td>
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<tr>
<td>Industrial</td>
<td>3</td>
<td>1,391</td>
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<tr>
<td>Hazardous</td>
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<td>120</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>140,491</td>
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</tbody>
</table>

* After sampling, characterization, and consolidation
WVDP Waste Operations
Accomplishments

New Generation Waste Disposition

- Hazardous/Universal Waste Shipped
  - 211 ft$^3$ Contract to Date
- Industrial Waste Shipped
  - 78,388 ft$^3$ Contract to Date
- LLW Shipped
  - 103,060 ft$^3$ LLW Contract to Date
- MLLW Shipped
  - 596 ft$^3$ LLW Contract to Date
WVDP Waste Operations Accomplishments

  - RH-TRU Waste Processing
    - Removed 32 of 79 High Dose RH-TRU drums removed from the Chemical Process Cell (CPC) in the Main Plant
  - RH-MLLW Processing
    - Completed Repackaging 18 of 18 containers of Remote Handled MLLW for shipment
WVDP Waste Operations Accomplishments

- Vitrification Melter, Concentrator Feed Make-up Tank (CFMT) and Makeup Feed Hold Tank (MFHT)
  - Prepared DOE O 435.1, Commercial Waste Exemption Request
  - Continued with work control documentation, engineering and grouting preparations
  - Finalized Request for Proposal for shipping the Melter, CFMT and MFHT and submitted it to bidders
Waste Management Challenges

- Characterization, size reduction and disposition of large components
  - CH TRU and RH-TRU oversize items
  - High dose containers
  - LLW and MLLW oversize debris
  - LLW Fuel Pool Resins
  - HLW tank pumps and components

Spent Fuel Resins Packaged in Poly High Integrity Containers (HICs) Stored in Concrete SUREPAKs

Packages for HLW Tank Pumps and Components

Waste Storage Vaults Containing HLW Tank Pump in non-spec packaging
Waste Operations Look Ahead

- Disposition 332 High Moisture Content Legacy LLW Containers
- Complete WPA Repackaging of 484 Legacy LLW Containers
- Complete Melter Route Identification & Transportation Safety Plan
- Grout the Vitrification Melter
- Ship the Vitrification Melter, Concentrator Feed Make-up Tank (CFMT) and Makeup Feed Hold Tank (MFHT)
- Complete Removal of Low Dose RH-TRU Drums from the CPC, plan removal of ~140 more
- Continue Development of TRU Waste Disposition Plan
- Complete approximately 75 Shipments of Legacy and New Generation Waste (~47,915 ft³)