Y-12 Waste Management 2013 Update

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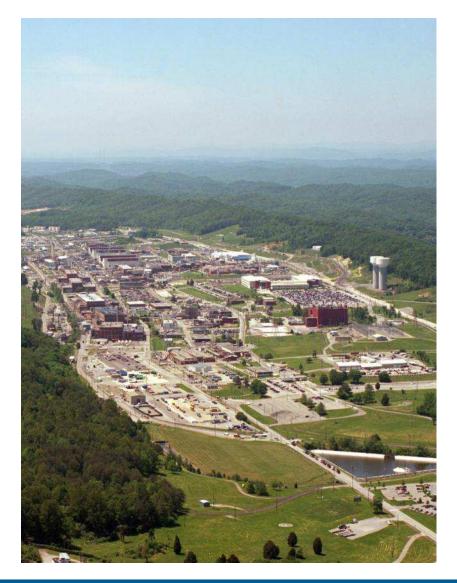
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Y-12 National Security Complex

- DOE/NNSA Site
- 1943 Manhattan Project
- 800 acre site
- 34,000 acre Oak Ridge Reservation, East Tennessee
- >350 buildings (>5.8 M sq ft)
- Active production and storage mission for uranium materials
- 4,500 employees
- 2000 m³ of LLW per year (~600 boxes & 1200 drums)



Y-12 WM Issues / Accomplishments

- Awaiting resolution of Y-12/Pantex Contract protest
- Currently shipping to:
 - NNSS
 - ES Clive
 - Perma-Fix M&EC
 - Perma-Fix DSSI

- ES Bear Creek
- Veolia
- Clean Harbors
- 270-Day disposal target for all wastes
- NNSS high-volume LLW generator in FY13 so far
- New Oversize Reusable 7A (fissile-tested) container (690 ft3)
- Retrieved waste from Impact Services Facility
- Mercury mitigation efforts continue
 - Storm sewers, outfalls, reroute run-on/off, treatability studies
- WM Planning for Future Ops (UPF, reducing waste streams)

Y-12 WM (continued)

- Interests in what other sites are doing:
 - P&T Subgroup issues
 - DOT vs DOE release limits, LSA/SCO discussions
 - Suspect bolts/straps
 - ATMS changes
 - Packagings for fissile wastes
 - Authorized limits for rad used oil
 - NDA uncertainty
 - Stabilizing pyrophoric DU turnings
 - Use of HEPA-filtered enclosures (e.g., Perma-Con®)
 - High-voltage smoke detectors (80 µCi Am-241)
 - Shelf-life of poly-lined bung top drums (aging, brittle)

Design

Split-cavity 3.5m L x 2.7m W x 2.8m H (12' x 9' x 9') Max gross wt 10,660 kg (23,500 lb) D-rings for securement & lid lifting





Structure

4" x 4" x 3/8" square HSS tubing - framing 4" x 2" x 1/4" A500 steel tubing - support 10 gauge A1011 hot rolled steel - panels





Overpacking





Load on Trailer



