



# **MANAGING SAFETY AND COMPLIANCE AT HANFORD'S T-PLANT TO MEET THE TRANSURANIC (TRU) PACKAGING FEED TO THE WASTE ISOLATION PILOT PLANT (WIPP)**

**Presented to: Contractors Transportation  
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# T-Plant



The Department of Energy's (DOE) oldest nuclear processing Facility at the Hanford Site



# Background

- **October 2008**
  - T-Plant staffed only to support base operations.
  - No WIPP processing or shipments budgeted, therefore no repackaging staffed.
- **American Recovery and Reinvestment Act (ARRA)**
  - Budget for WIPP shipments restored. Begin staffing and training to support repackaging of 2,500 cubic meters of TRU waste shipped to WIPP by FY 2011.



# ARRA Staff

- **Over 20 nuclear chemical operators (NCOs), radiological control technicians (RCTs), and support staff were hired in April 2009; many with no nuclear experience.**
- **Core training completed July 2009 including:**
  - fundamentals, rad workers, HAZWOPER, respirator and forklift training.
- **Facility training and on-the-job training (OJT) was completed October 2009 on waste handling and repackaging.**
- **Three repackaging lines operational by the end of November 2009 on a double shift basis.**
- **Additional staff hired to operate four repack lines in the canyon permacons:**
  - Operational April 2010
  - Total staff >90 personnel



# Safety

- **Strong safety culture with four Occupational Safety/Industrial Hygiene professionals in the facility; five minor first-aid cases; care of the employees is paramount to success!**
  - An RCT felt pain in lower back after kneeling down to survey drum sleeve in permacon
  - An NCO using weights at lunch cut finger
  - A teamster experiences eye irritation while transporting equipment, eye lash
  - An NCO pokes thumb when a metal sliver from a drum found its way through protective outer gloves
  - An NCO steps off 5” platform and experiences pain in lower back and hip area while in the permacon



# NCOs perform Mock-Up Training Exercise



Experienced NCO initiating mock-up training with new NCO's.

Trainee learning to connect parent drum to glove bag.



# Processing Operations in Permacons using Newly Trained NCOs



Performing repack operations in a permacon in T-Plant canyon.

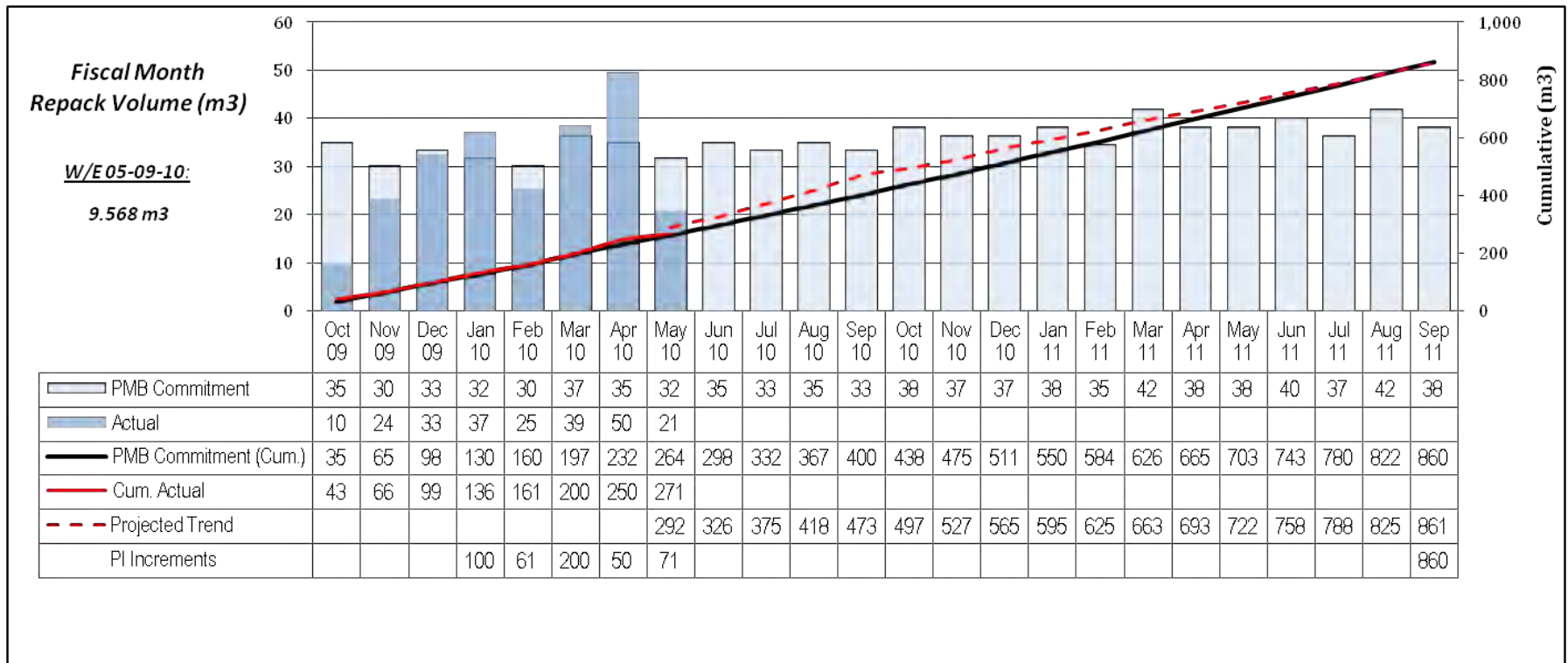
# Complex Waste Stream



**NCOs performing a mock-up demonstration for Plutonium Finishing Plant Z-9 waste. This was used to determine the capability to process the 700 drum waste stream.**



# TRU Drum Repackaging



# Keys to Success

- **Focused Training**
- **Strong Con Ops Leadership Safety Culture**
- **Mentoring - Mentoring - Mentoring**



# Leadership



**Dr. Lou Centofanti -  
Perma-Fix,  
visiting T-Plant**

