LANL Enduring Waste Management Program Transformation FY2010-FY2013

- What is the LANL Enduring Mission Waste Management Program?
The LANL Enduring Mission Program is the responsible organization that manages all newly generated waste types.

- LLRW
- MLRW
- Newly Generated (NewGen) TRU
- Hazardous/Chemical (Haz/chem)
- Industrial waste
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- What did the LANL Enduring Mission Waste Management Program look like before FY2010?
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- The LANL Waste Management Program was controlled by three separate Associate Directorates.
- Each of the nine Facility Operations Directorates (FODs) owned its own waste management program.
- 95% of all LLRW was disposed of on-site at the Technical Area 54 disposal cell.
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- LANL had three waste tracking and data management software programs that did not interface with each other.
- In short, the LANL Enduring Waste Management Program was inwardly focused, decentralized, and running below its maximum operational efficiency.
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- **What changed at LANL?**
- **Closure of Area G for on site LLW waste disposal**
  - Increased regulatory requirements to meet off-site TSDF WAC.
  - Implementation of RCRA Permit
  - Implementation of Site Treatment Plan
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- In FY 2010, LANL began site wide, Waste Management Program cultural and operational shift.
- The LANL Enduring Waste Management Program is now managed by one Associate Directorate, the Associate Directorate of Environmental Safety and Health (ADESH).
- ADESH certifies, manages, and supports single, site wide Enduring Mission Waste Management Program.
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- LANL has significantly reduced the generation of all routine waste types by implementing innovative waste reduction, reuses, reclassification, and other waste minimization strategies.

- LANL now has one master waste tracking and data management software program call WCATS.

- 99% of all LLRW is disposed of off-site at TSDFs.

- At the end of FY2013, the LANL Enduring Waste Management Program has now become outwardly focused and centralized, and has vastly improved its operational efficiency.
LANL Enduring Waste Management Program
Accomplishments in FY2013

- Saved LANL $2.2 million dollars via waste minimization, reuse, and recycling programs.
- Reduced LANL waste volumes by 13,698 m3 through recycling, waste minimization, and the LANL Green is Clean Program.
- Performed (4,011) waste certification, verification, and other assessments to support the LANL RWMB, RCRA Permit, and DOE Order 435.1.
LANL Enduring Waste Management Program Transformation FY2010-FY2013

- Inspected and shipped over (1,300) DOT complaint shipments of waste.
- Processed over 800 LLRW and 600 TRU Non Destructive Analysis requests.
- Reclassified over 1000 m3 of TRU to LLRW at a tremendous cost savings to LANL.
- Shipped over 200 m3 of STP waste, more than the previous six years combined.
LANL Enduring Waste Management Program
Accomplishments in FY2013

- Vastly expanded the LANL Green is Clean Program.
- Fully implemented the LANL SCO Reclassification Program.
- Fully implemented the LANL Indirect Analysis Program.
- Implemented the use of OREX PPE programs in over 80% of the LANL FODs.
LANL Enduring Waste Management Program Accomplishments in FY2013

- Initiated the LANL Pilot Waste Consolidation Facility.
- Maximized the use of off site TSDF facilities to support the LANL goal of shipping 99% of all waste generated off site.
LANL Enduring Waste Management Program Goals for FY2014

- Save LANL $5 million dollars via waste minimization, reuse, and recycling programs.
- Reduce LANL waste volumes by 15,000 m3 through recycling, waste minimization, the LANL Green is Clean Program, and other waste minimization programs.
- Complete FY2014 with zero compliance findings in the LANL Department of Transportation shipping program.
- Complete FY2014 with zero compliance findings in the LANL RWMB, RCRA Permit, and DOE Order 435.1 compliance programs.
LANL Enduring Waste Management Program Goals for FY2014

- Ship over (1,500) DOT complaint shipments of waste offsite.
- Process over 1500 LLRW and 1000 TRU Non Destructive Analysis requests.
- Reclassify 1500 m3 of TRU to LLRW.
- Ship 500 m3 of STP waste.
- Ship over 99.5% of all waste to off-site TSDFs.
LANL Enduring Waste Management Program Goals for FY2015

- Save LANL over $10 million dollars via waste minimization, reuse, and recycling programs
- Complete construction of the Transuranic Waste Facility by end of FY2016.
- Complete Decay in Storage Shaft and Laydown Areas for Isotope Production Facility waste and LANSCE accelerator large component waste.
- Complete Consolidated Waste Facility.
- Complete Re-Use and Re-Purpose Evaluation of all former TRU Facilities at TA-54.
LANL Enduring Waste Management Program Endpoint

- All waste types are minimized to the maximum extent practicable. LANL institutional goal is Zero Waste effluent.
- All waste types are generated, sorted, characterized, and packaged in accordance with disposal site WAC and DOT Regulations.
- Reduced residence time
  - Reduce the period between waste generation and disposal
- Increased transportation efficiency
  - Shorter routes, fuller trucks
- Decreased treatment costs
- Automated compliance reporting
LANL Enduring Waste Management Program Goals

Challenges

- Top Three Challenges
  - Aging workforce
    - Median age of the LANL Waste Management worker is 48.
    - Our youngest Waste Management Coordinator is 30.
  - Bow wave of retirements in FY2014 and FY2015
    - The WM Division will lose ~30% of our senior staff between FY14-15.
  - Hiring and Training Replacements
    - Of a staff of 100, we have (6) students.
    - Difficult to recruit people to LANL.
Questions or Comments?

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