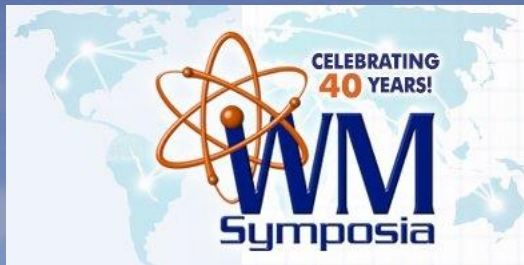


W a s t e I s o l a t i o n P i l o t P l a n t

WIPP Status and Plans - 2014

An Update on America's Deep Geologic Radioactive Waste Disposal Repository

Session 096A
March 5, 2013
Phoenix, Arizona

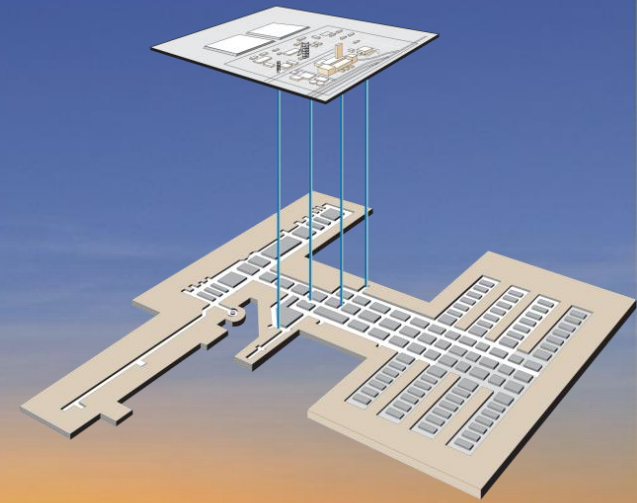


Roger Nelson, Chief Scientist
Jose Franco, Manager
U.S. Department of Energy
Carlsbad Field Office



A Look at WIPP Today

- Safe TRU waste disposal for nearly 15 years (March 1999)
- ~12,000 shipments received and ~91,000 m³ disposed
- 22 sites cleaned up of legacy TRU waste
- Regulatory Changes In Process
- Shipping from Four Major DOE Sites
- New Panel 7 Emplacement Operations
- Aging infrastructure and recent events



2013 Highlights: WIPP Shipments Log 14 Million Loaded Miles

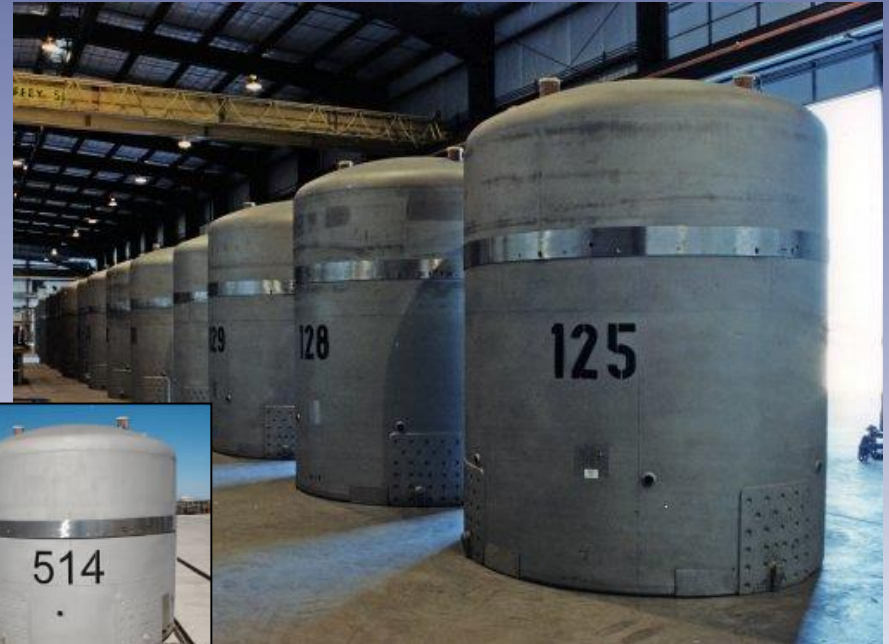
More than 28 Million miles
travelled safely (about 60
round trips to the moon)



Largest Type B Shipping Program in the World?



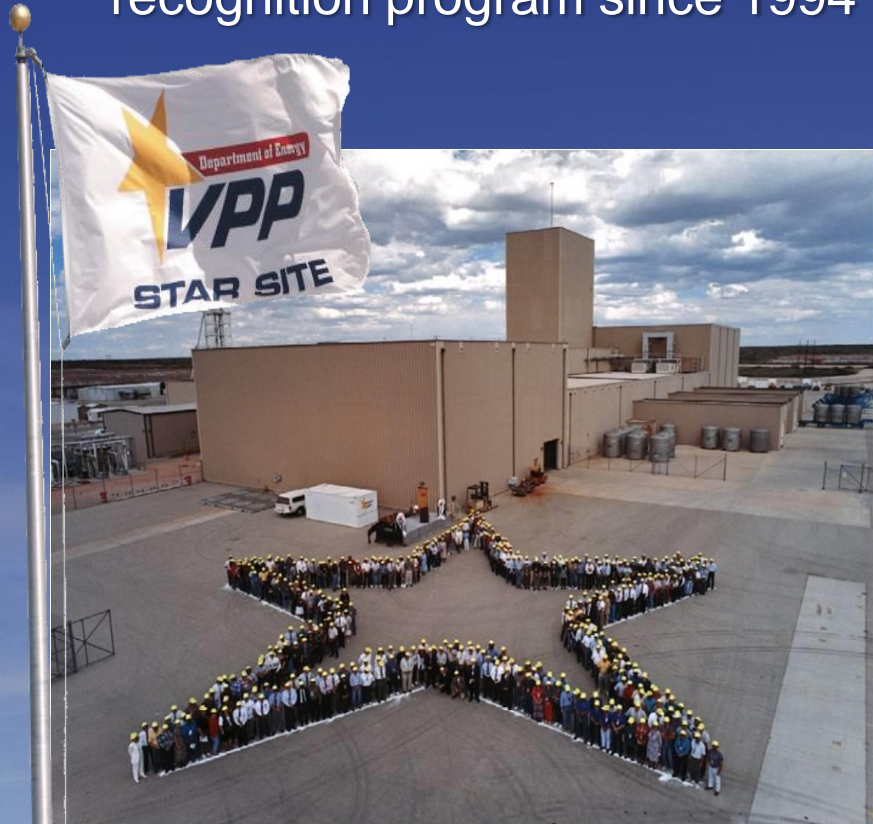
- Packages
 - 84 TRUPACT-IIs
 - 15 HalfPACTs
 - 6 TRUPACT-IIIs
 - 12 RH-72Bs
- Trailers - 87
- Trucks - 28
- Driver Teams
 - 56 drivers (22+ teams)
 - 10 terminal staff
- Mobile Loading
 - 5 Teams
 - 7 Systems



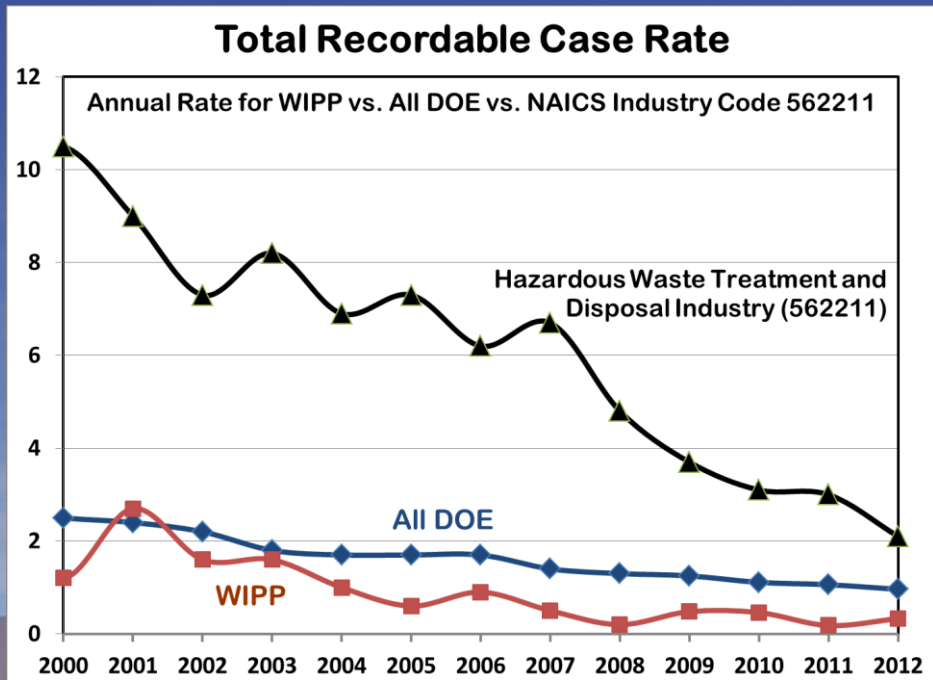
2013 Highlights:

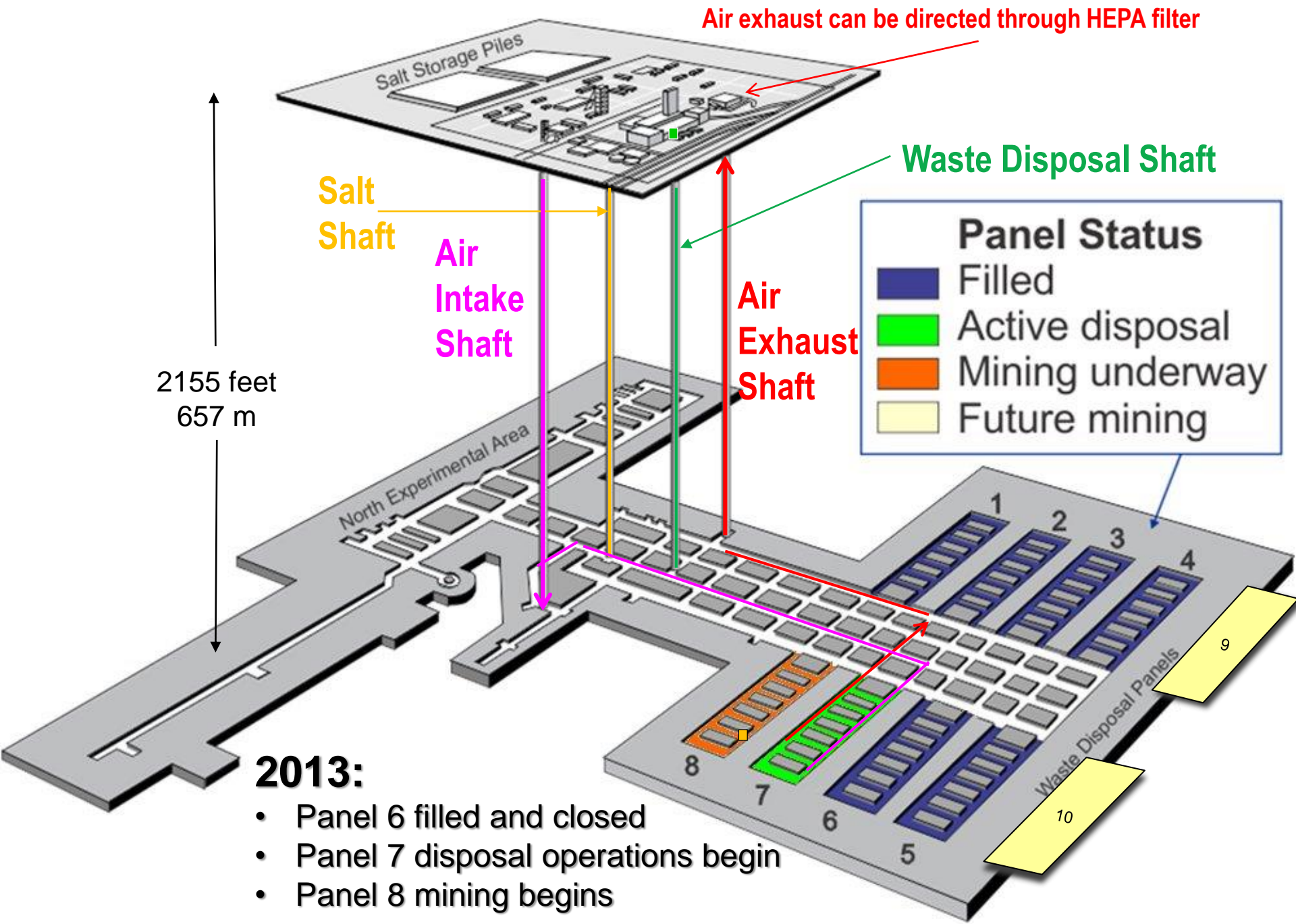
14+ years safe mining & disposal operations

Star Status in DOE safety
recognition program since 1994



Lowest Recordable Case Rates

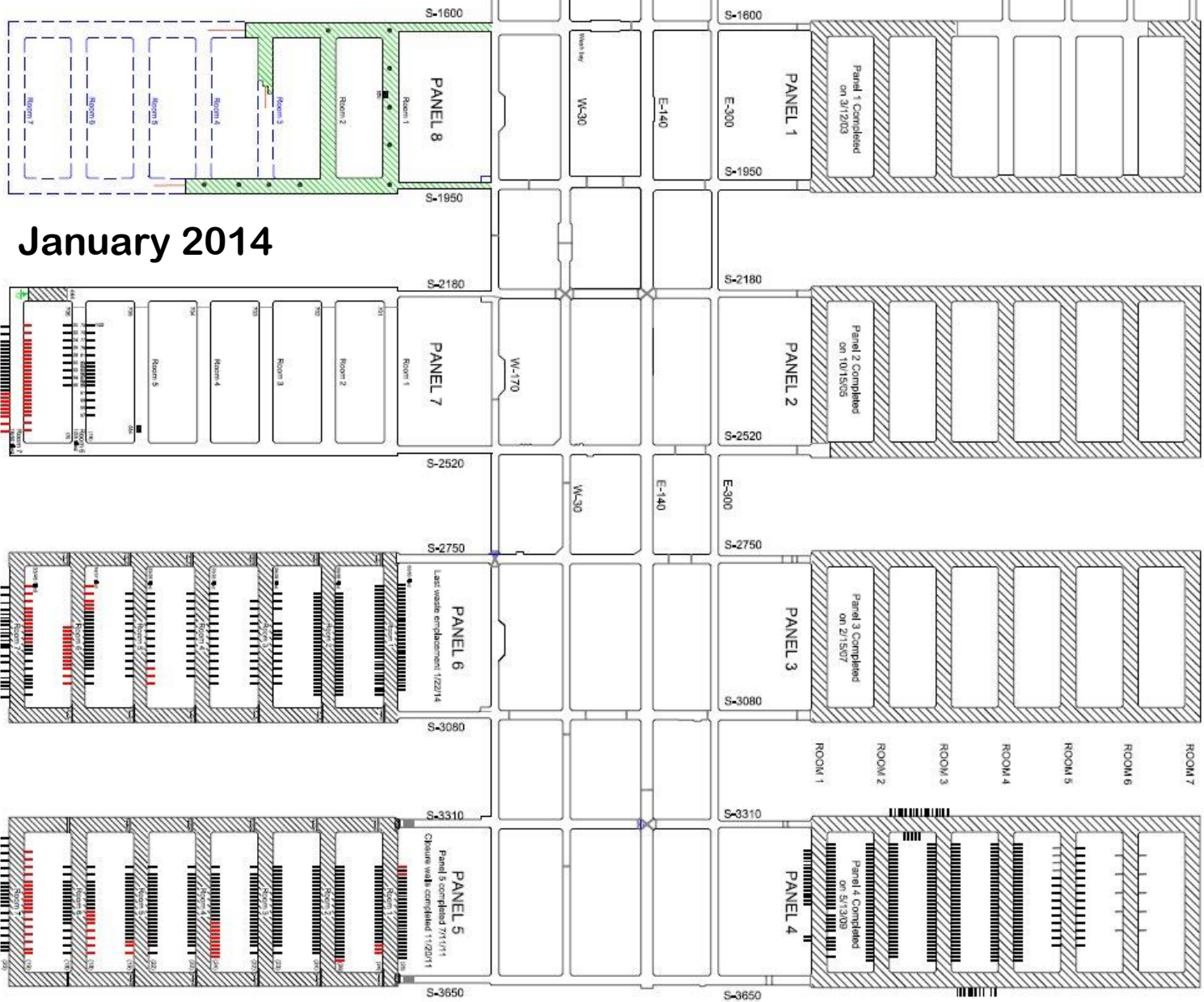




2013:

- Panel 6 filled and closed
- Panel 7 disposal operations begin
- Panel 8 mining begins

WIPP Waste Emplacement Status



January 2014

2013 Highlights:

Mine Operator of the Year Award



- Presented by New Mexico Mining Association and the New Mexico State Bureau of Mine Safety
- WIPP honored 25 of last 27 years

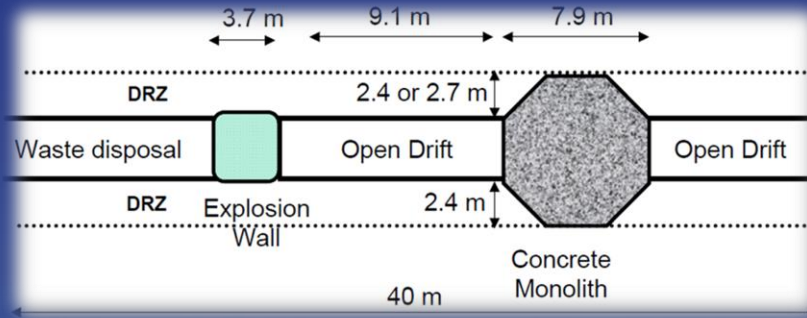


2013 Highlights:

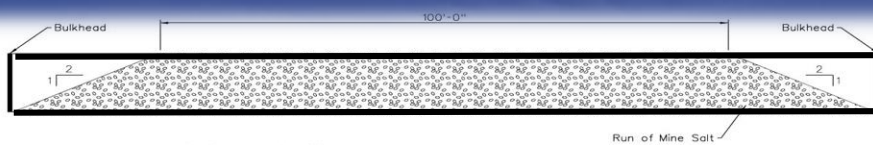


-

2013 Regulatory Changes - WIPP Panel Closures

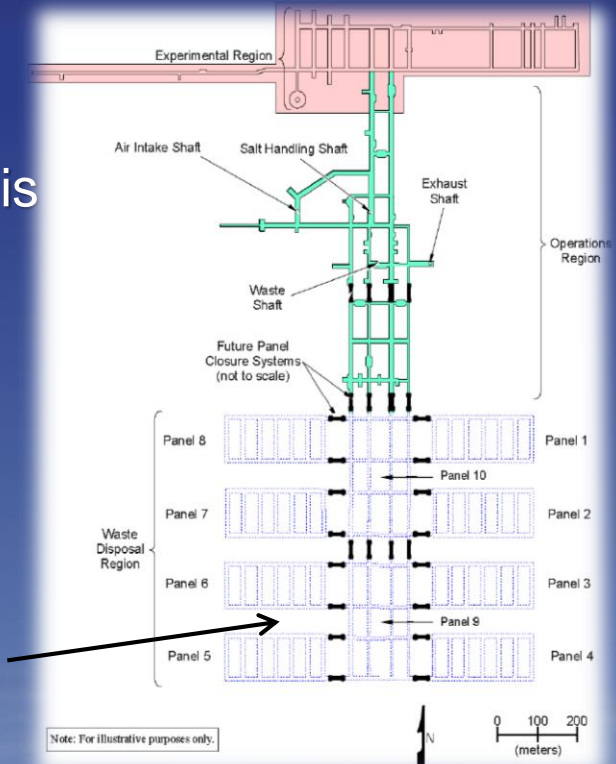


Replace this
with this



1. Salt Zone 100'-0" minimum length.
2. Salt layers can be inclined within specifications.
3. Detailed design drawings are presented in Appendix D.
4. The ROM salt shall be placed to fillup to the back.
5. ROM salt is a porous salt in the loose state derived from underground mine operations at WIPP.

WASTE DISPOSAL SIDE



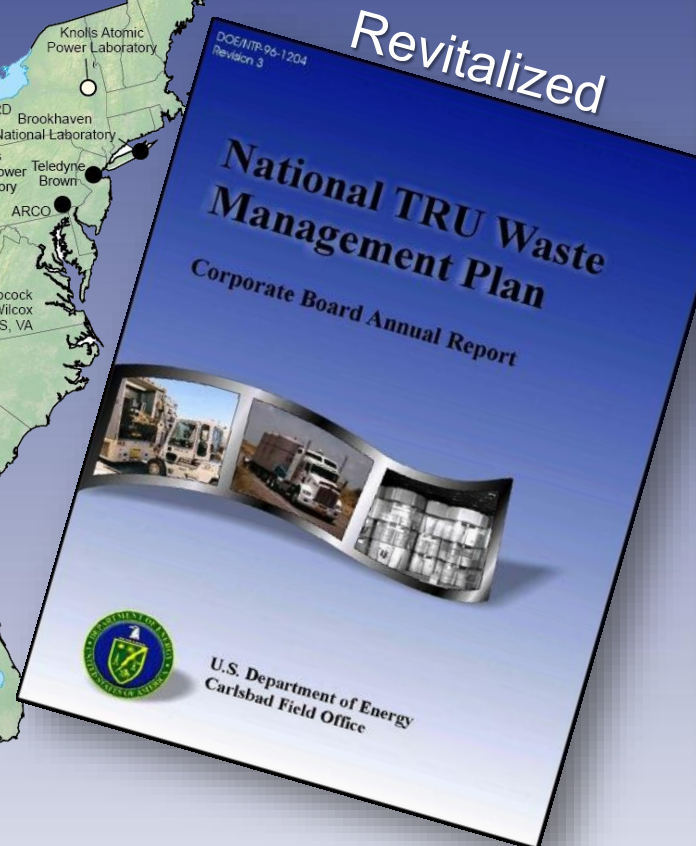
28 times

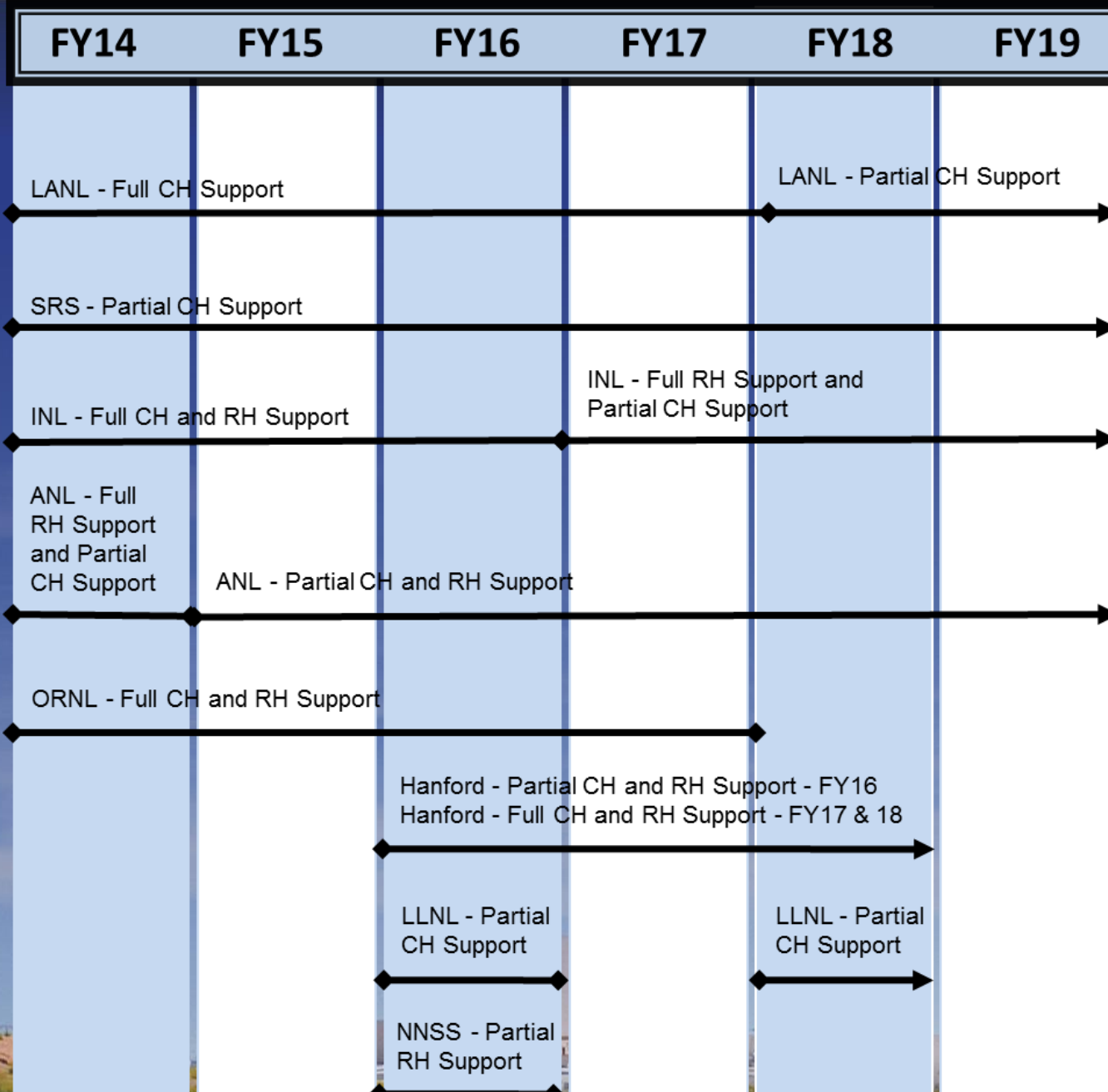
- 2011 Planned Changed Request to EPA → Rulemaking
- EPA final rule expected early 2014 approving the change
- New Mexico Hazardous Waste permit modification (Class 3) Notice to Approve
 - 60-day public comment period closes April 3, 2014



Legacy TRU Cleanup

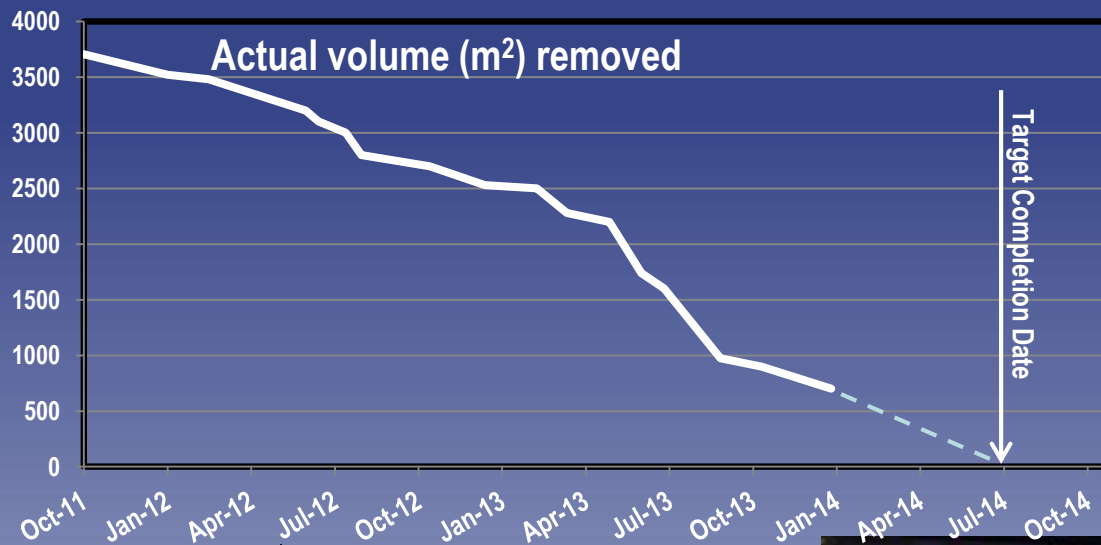
22 sites cleaned up of legacy TRU waste to date



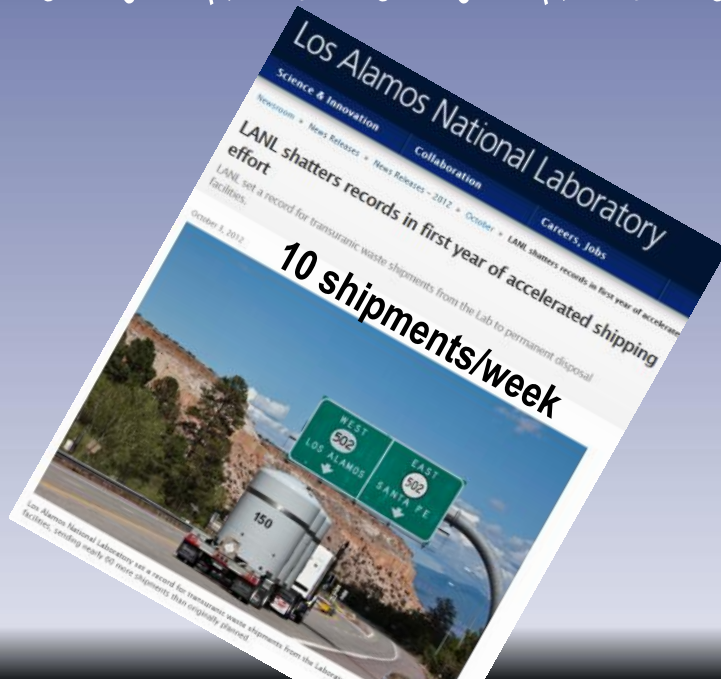


National TRU Program Support for TRU Waste Shipping Sites

LANL 3706 m³ TRU Waste Framework Agreement w/ State of New Mexico



Complete removal of 3,706 m³ of above-ground TRU waste from Los Alamos National Laboratory by June 2014



LANL 3706 m³ TRU Waste Framework Agreement w/ State of New Mexico

WIPP Support to LANL Includes:

- Priority shipping resources (MLU & TRUPACT)
- Expanded characterization capability
 - Redundant NDA (HENC and SuperHENC)
 - ISOCS NDA for boxes (SLB2+SWB)
- High Energy Real Time Radiography (RTR)
 - High density waste
 - Lead-lined drums





3706 Transuranic Waste Campaign

New Mexicans working together to meet a national environmental challenge

Panel Session 082

Wednesday: 1:30 PM - 5:00 PM

Room: 102BC

Jeffrey Mousseau, LANL

Pete Maggiore, US DOE (USA)

David McInroy, LANL

Michael J. Romero, LANL

Christine Gelles, US DOE (USA)



2013 Highlights: TRUPACT-III Campaign Completes Large Boxes from SRS Shift to INL: 1-2/week by end of FY14



WIPP CCP Returns to Oak Ridge in 2014

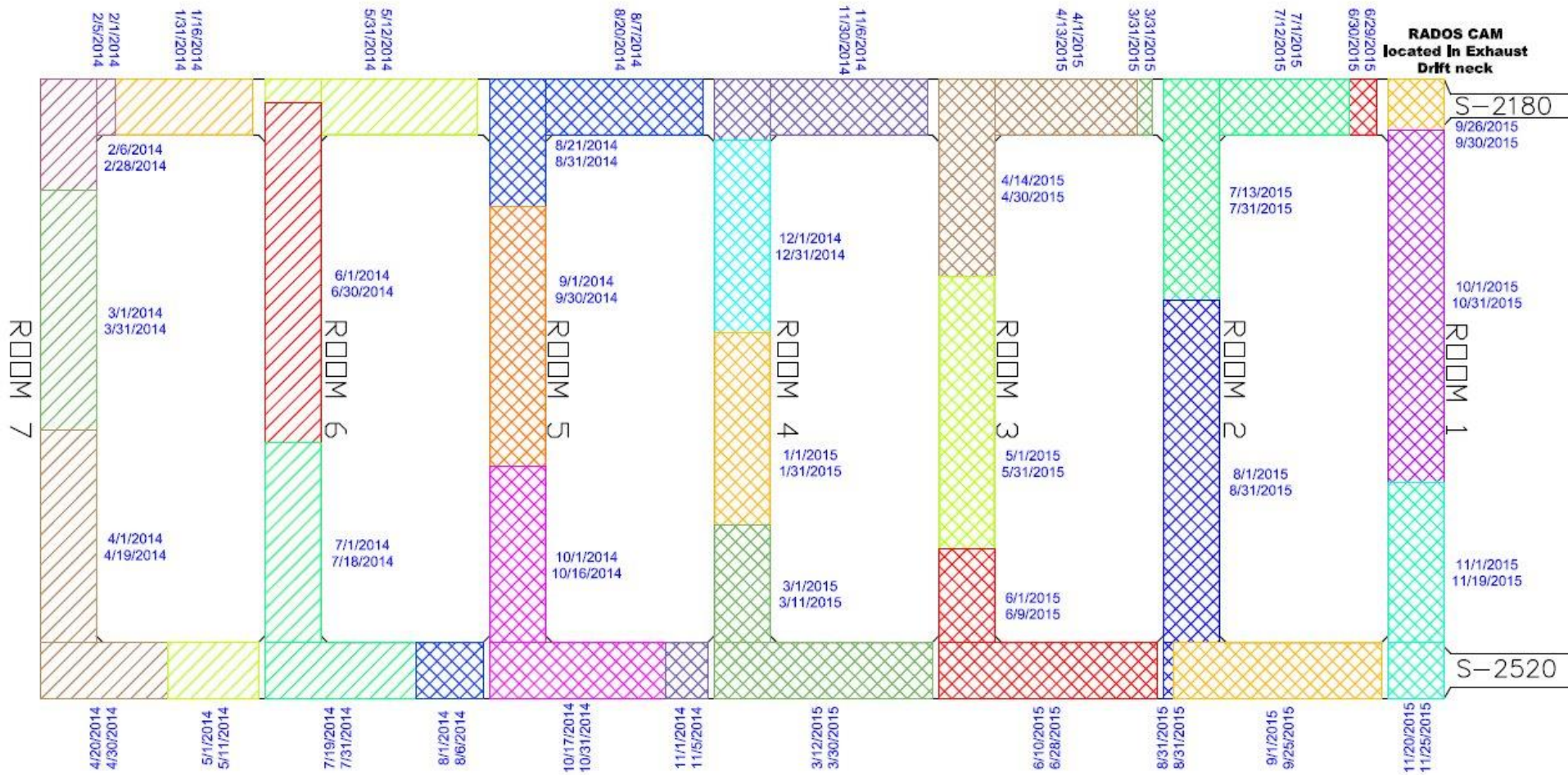
- Both Contact Handled and Remote Handled TRU waste packaging, characterization and Shipping
- Certification Audit: January 2014
- Anticipated First Shipment: April 2014
- 2-3 shipments/week by end of 2014 (mixed RH and CH)



TRU Waste Processing Center (TWPC)

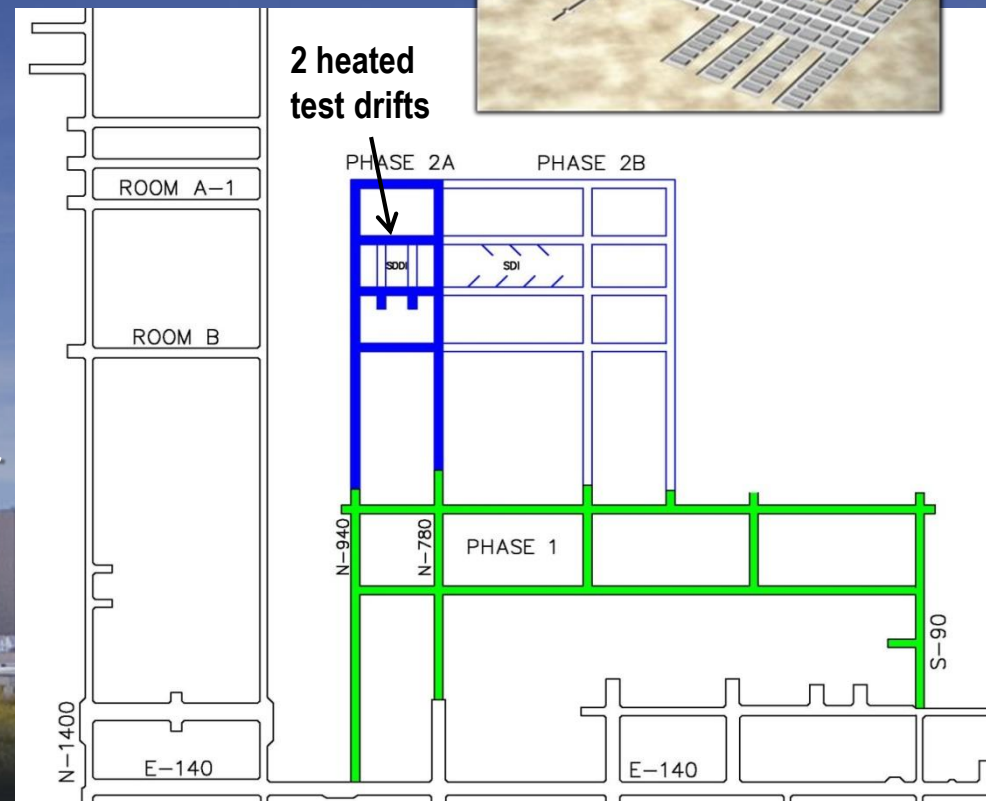
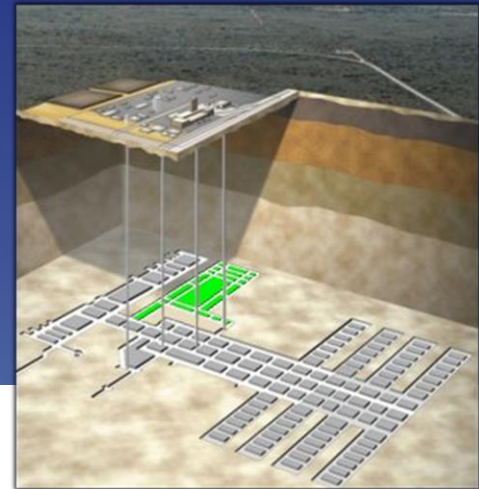


Panel 7 Emplacement Plan: 23 CH +3 RH Shipments/week



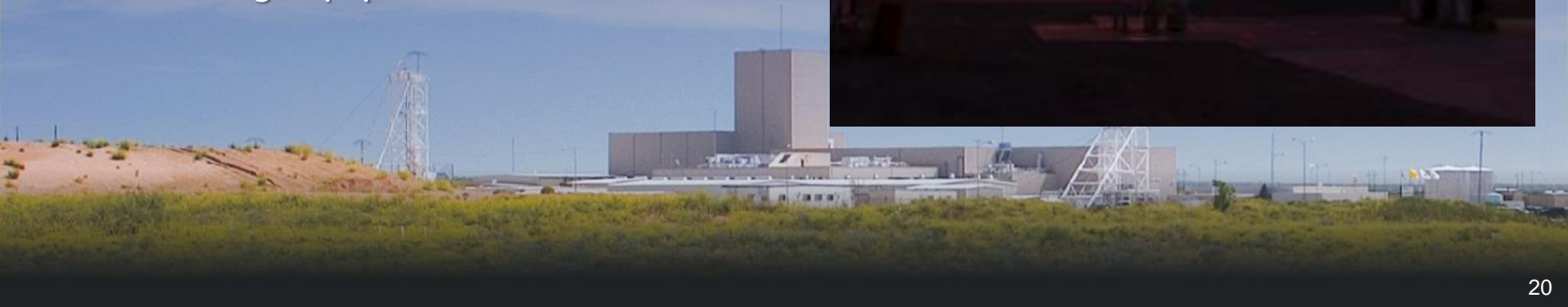
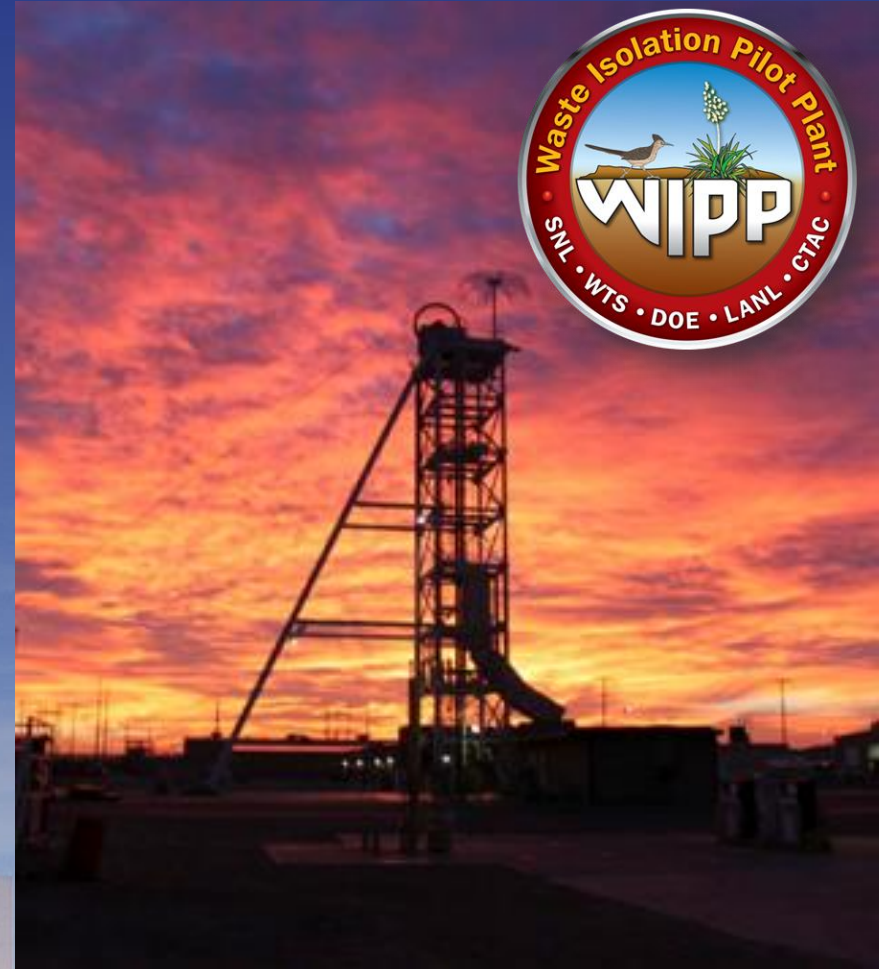
Salt Disposal Investigations to Study Effects of Heat-Generating Waste Disposal in Salt

- **Location:** Proposed SDI project is for testing and experimentation at WIPP
- **Purpose:** Investigate use of salt formations for disposal of heat-generating waste types
- **Status:**
 - Mined SDDI test area completed March 2013 – Awaiting funding for instruments
 - Coupled T-H-C modeling development indicates possible “heat-pipe” behavior
 - Heater design and fabrication ongoing
 - Earliest possible heater start: End FY17
- **Re-Entry:** 1980s heater test area for forensic sampling



2014: Opportunities and Challenges

- Budget
- February mine fire and radiological event recovery plan completion
- Resume nominal waste shipments and disposal operations
- Regulatory Activities
 - Panel closure redesign Class 3 PMR
 - Additional disposal panels (9A+10A)
 - EPA Re-certification (every 5-years)
- Infrastructure Revitalization
 - North Access Road
 - Salt and Air Shaft Head-frames
 - Waste Handling Equipment
 - Mining Equipment





Permanent Isolation in Deep Geologic Salt A National Solution

