



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

Radioactive & Hazardous Materials Committee

Waste Isolation Pilot Plant

October 21, 2020

Reinhard Knerr
Manager, DOE Carlsbad Field Office

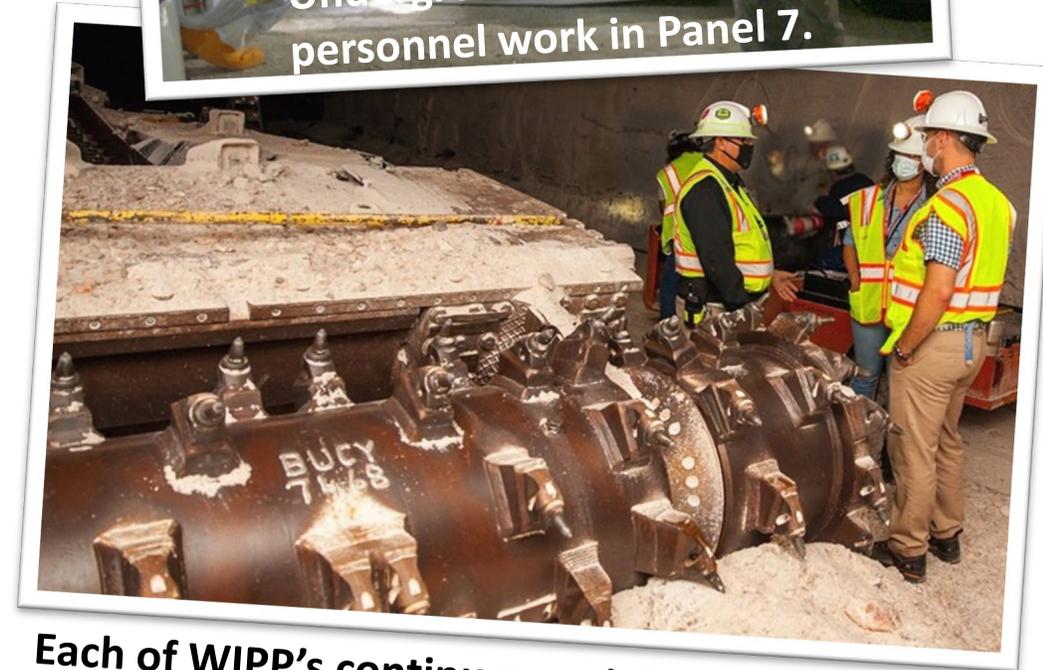
- Averaging 5 shipments/week despite pandemic challenges
- Total Shipments 12,777 (as of October 6)
- 2020 – 178 shipments
- First shipment in 15 years from Lawrence Livermore Laboratory
- Savannah River shipments resuming
- Panel 8 mining nearing completion
- Utility shaft excavation 116 feet
- NWP contract extension through 2021
- Completion of WIPP Bypass Road



- 273 columns of waste emplaced
- Mined 155,300 tons of salt to complete rough cut of Panel 8
- 8,476 rock bolts installed in 2020 to ensure mine stability (as of September 27)



Underground waste handling personnel work in Panel 7.



Each of WIPP's continuous mining machines can excavate 10 tons of salt per minute.

- LANL accounted for 26% of WIPP shipments in FY20
- LANL shipments currently have high priority due to ongoing national defense mission activities
- LANL has single certification program that includes both NNSA and EM waste
- Revision of required documents for LANL loading facility will maximize efficiency of LANL TRU waste shipments, allowing both NNSA/EM to ship waste



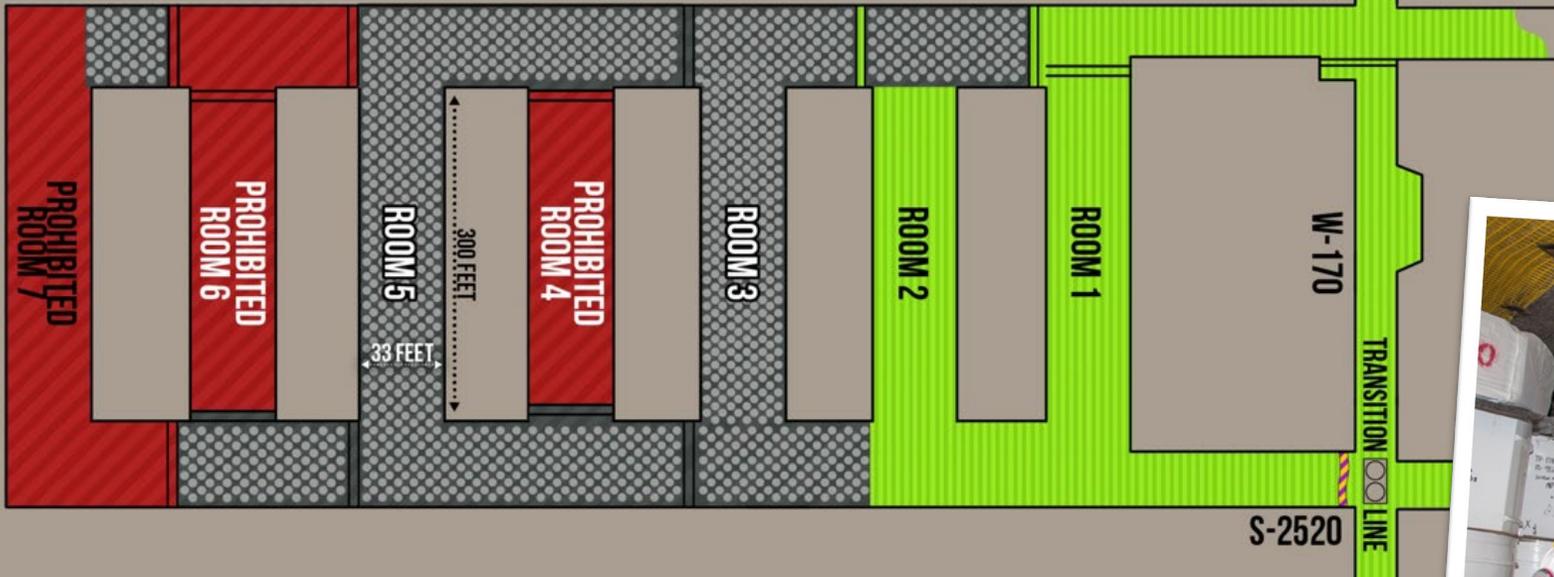
Workers open TRUPACT-II at WIPP.

Many factors in shipment prioritization

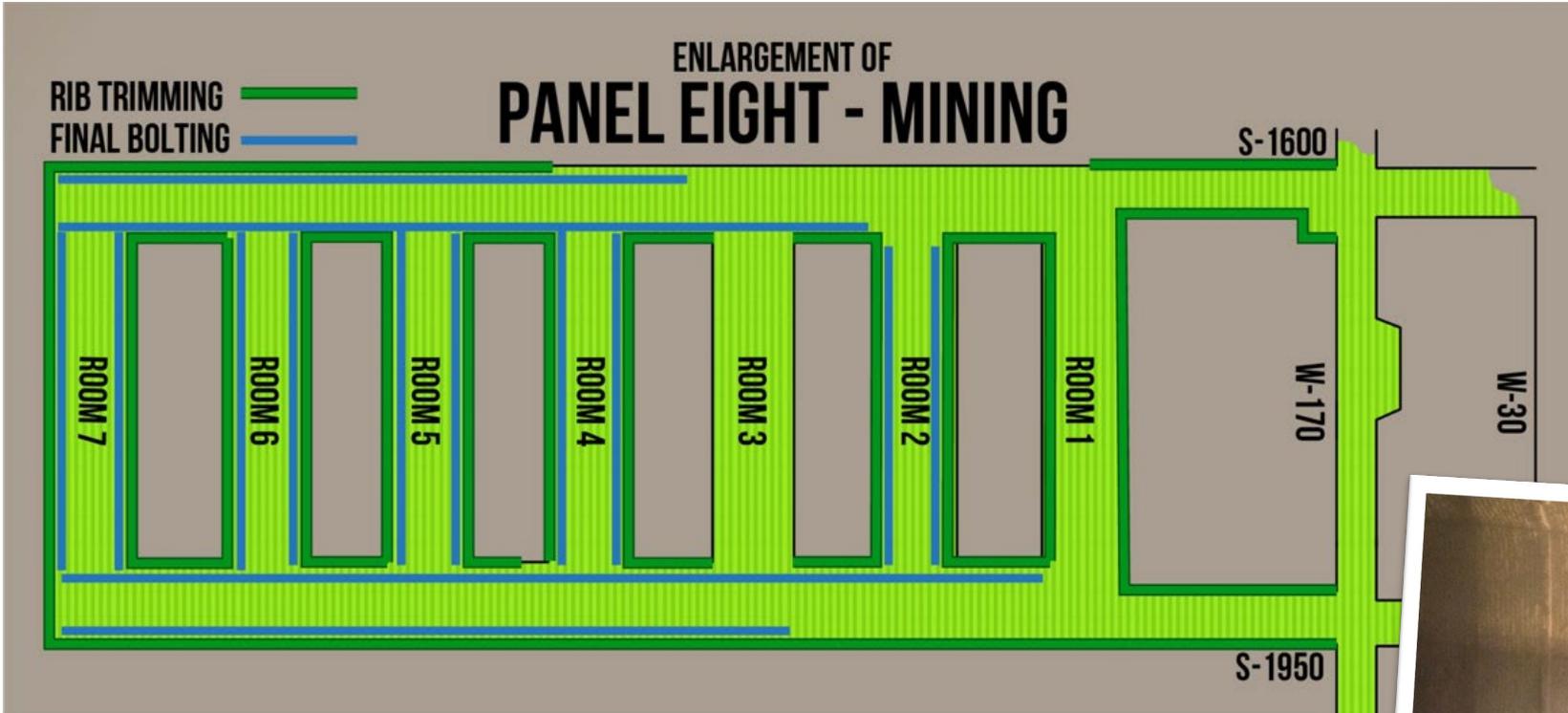
- **Long-term shipment prioritization is accomplished by evaluating many factors**
 - Regulatory agreements
 - Site treatment/closure plans
 - Impact to national defense mission
 - Availability of certified waste
- **Short-term impacts include:**
 - ✓ Inclement weather
 - ✓ Unscheduled maintenance
 - ✓ Generator site TRU waste handling issues



ENLARGEMENT OF PANEL SEVEN - EMPLACEMENT

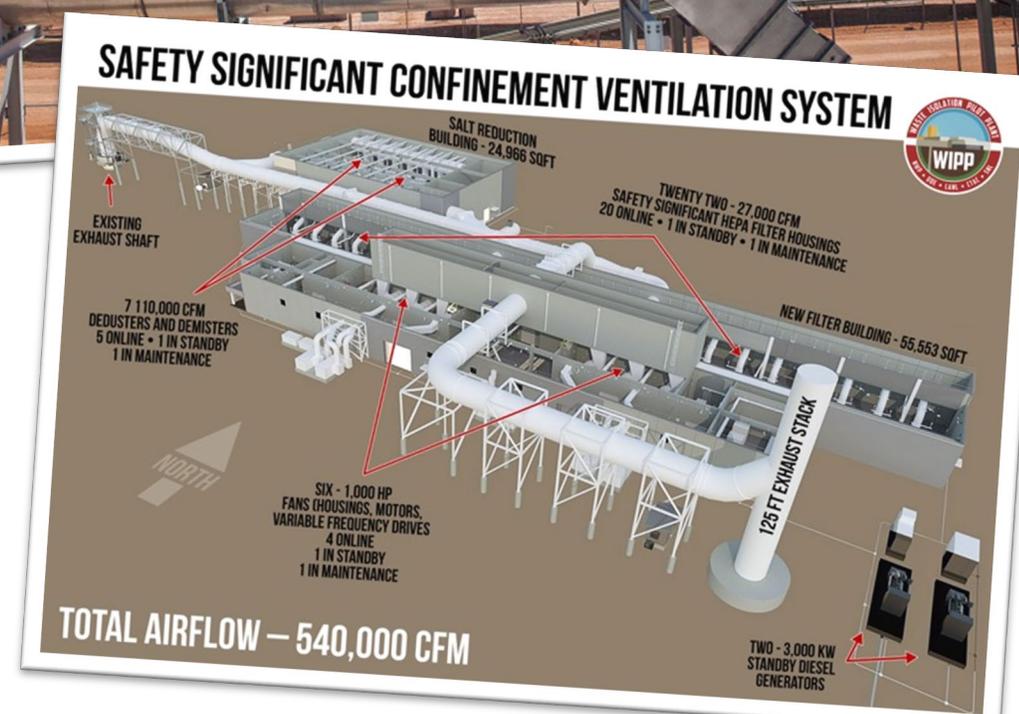


Underground waste handling personnel emplace TRU waste in Panel 7.

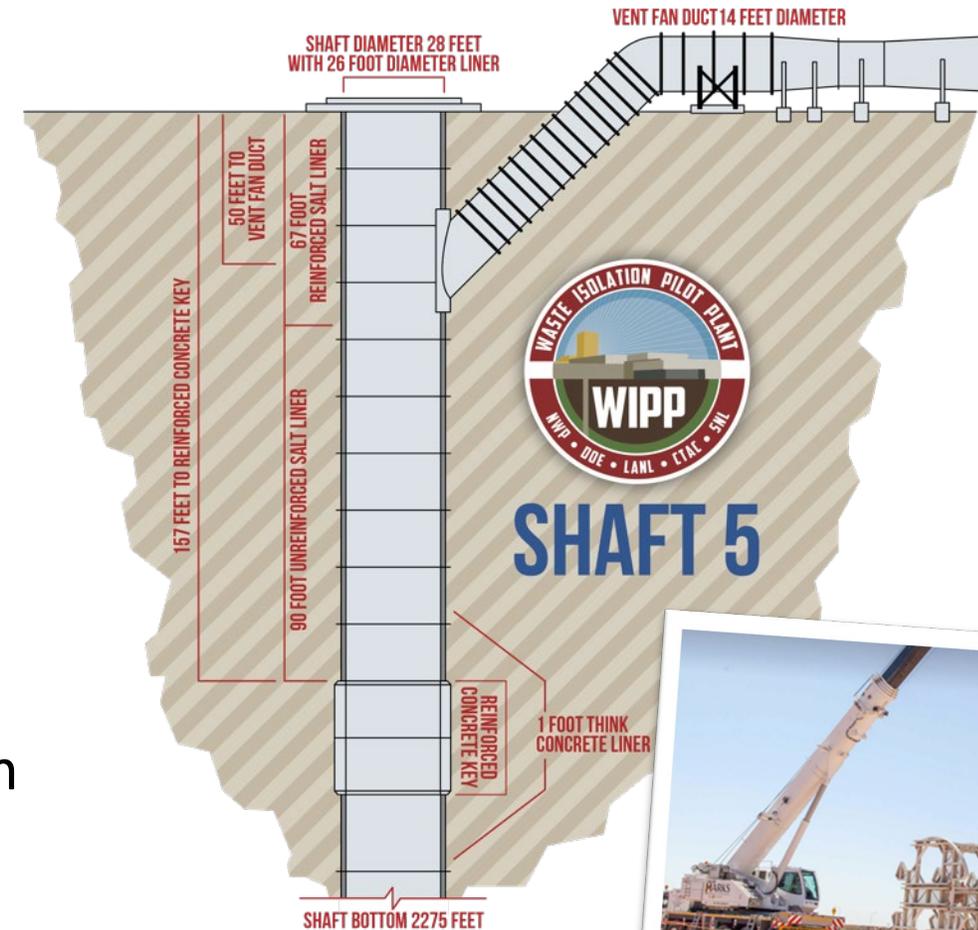


Safety Significant Confinement Ventilation System (SSCVS)

- Contract terminated, re-baseline documentation submitted to DOE
- Long-lead subcontractors unaffected
- Underground utilities installed
- Fabrication building completed
- Support trailer complex completed

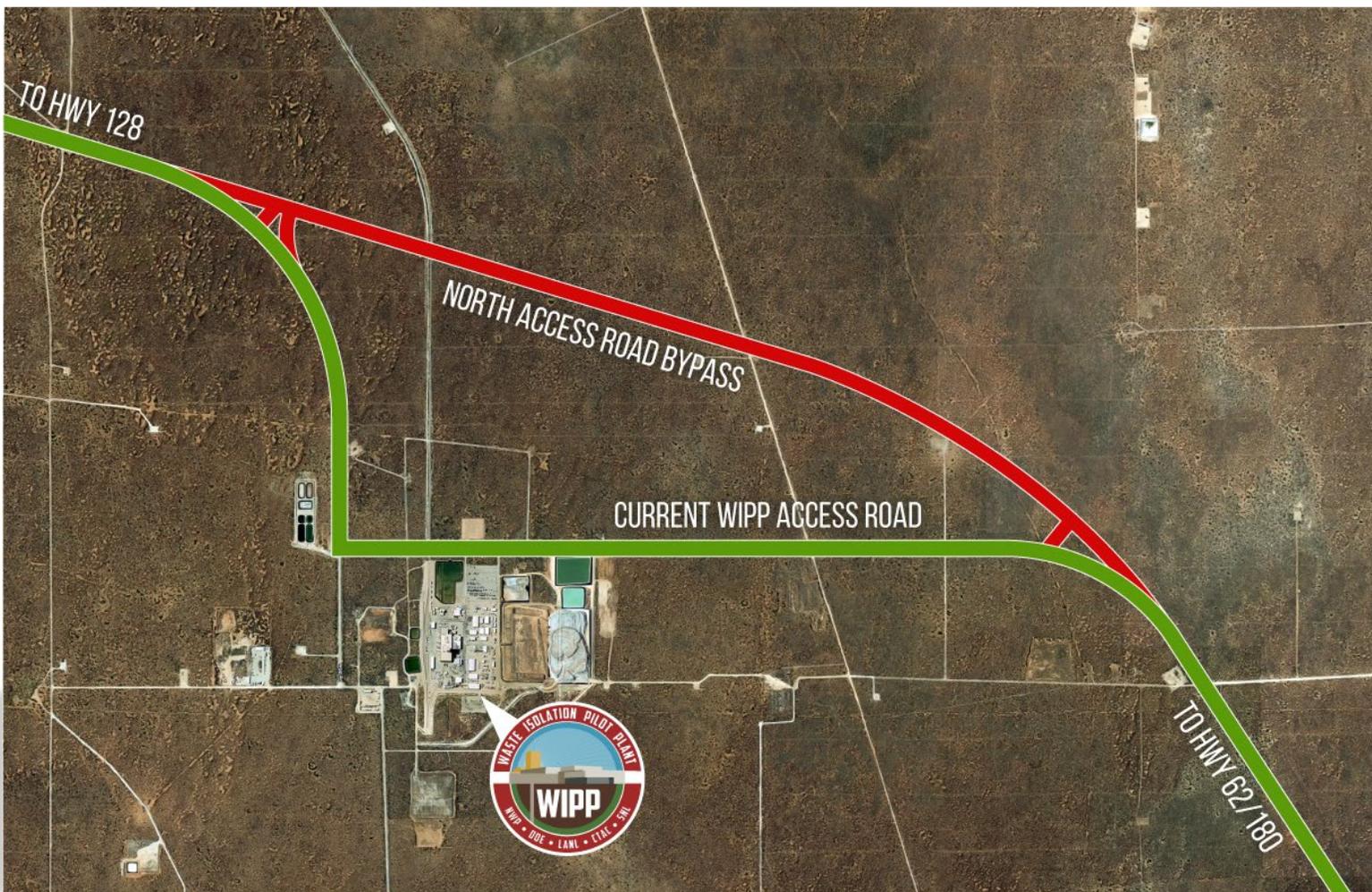


- Temporary Authorization (TA) issued by NMED, allowing work to begin
- Excavation to 116 feet, awaiting construction of headframe and completion of galloway multi-level work platform
 - Working with NMED on TA extension



A bucketload of excavated material is lifted from the utility shaft. The Galloway work platform is at center.

- 3.3 mile project completed
- Reroutes hundreds of oilfield vehicles per day away from WIPP site
- Increases safety for workers traveling to the WIPP site



15 projects under way

- New air compressors operational
- Salt hoist repair
- Fire loop replacement
- Fiber-optic upgrade
- Central Monitoring Room upgrade

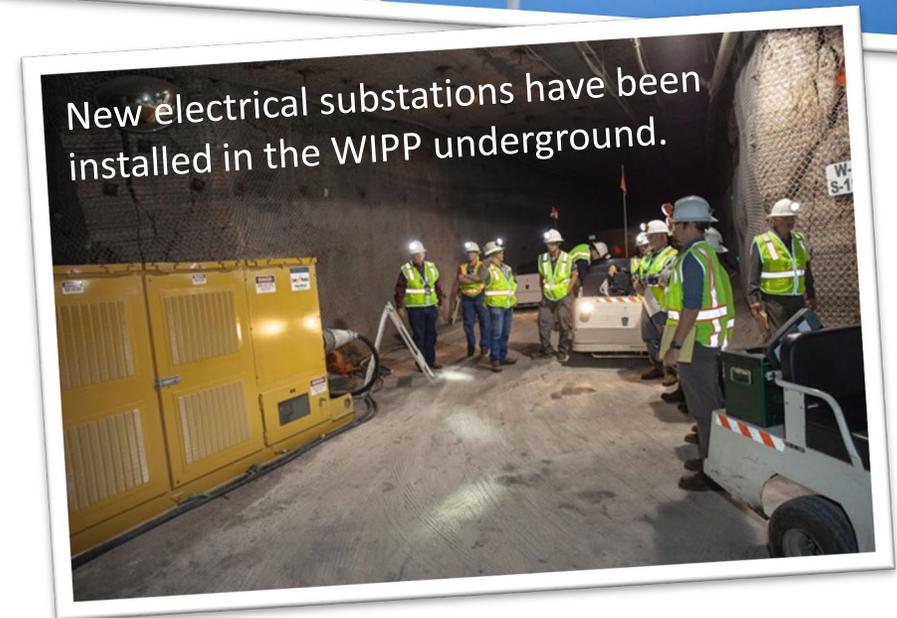
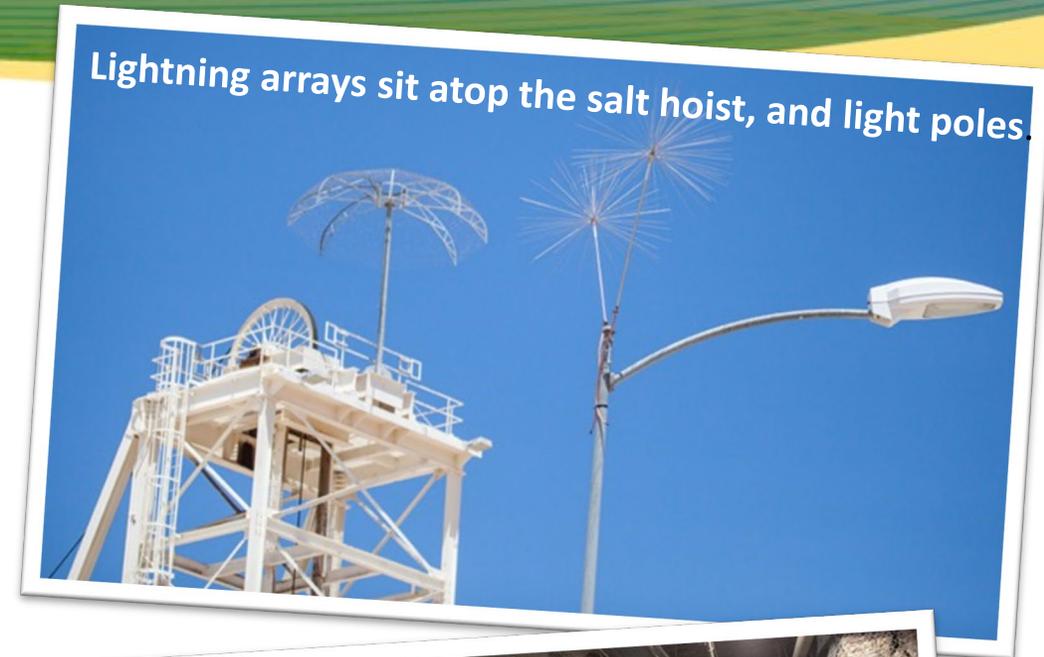


Repairs to the Salt Hoist are underway.



Multiple hydro-excavations are happening at WIPP for new air, fire water and fiber optic lines.

- Replacement of surface/underground electrical substations
- Above-Ground air line Replacement
- Lightning Array upgrade completed
- Public address system upgrade design



WIPP ON CAMPUS

- BROWN BAG SEMINARS
- CLASSROOM SESSIONS



WORKFORCE DEVELOPMENT

- SAFETY CLASSES FOR NWP AND INDUSTRY (SAFETYFEST)
- SKILLS DEVELOPMENT



STRATEGIC UNIVERSITY PARTNERSHIPS

EXPERTS PANEL

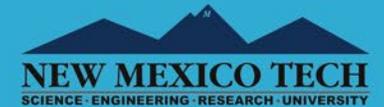
- PERIODIC REVIEWS
- RECOMMENDATIONS REGARDING: GROUND CONTROL & MINE DESIGN



THE UNIVERSITY OF NEW MEXICO

INTERNSHIPS

- 15-20 INTERNS EACH SUMMER



LEADERSHIP DEVELOPMENT

- EXECUTIVE FORUMS
- FRONTLINE MANAGER TRAINING
- 19 CADRES OF THE LEADERSHIP ACADEMY



QUESTIONS?