



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

WASTE ISOLATION PILOT PLANT

Southern States Energy Board

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Waste Isolation Pilot Plant Mission



Our mission is to provide safe and compliant characterization, transportation, and disposal of the United States' defense transuranic (TRU) waste while protecting workers, the public and the environment.



Overall Mission Accomplishments

- **22** sites completed TRU waste cleanup
- Over **213,300** waste containers emplaced
- **17 million** safe loaded miles traveled
- **490** shipments received and emplaced in FY2024

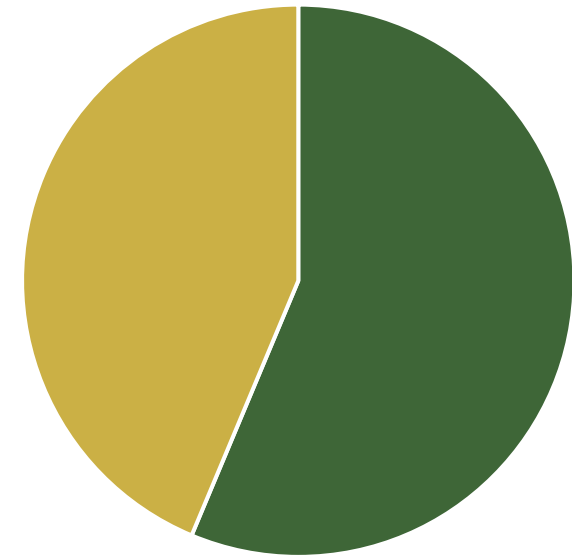


WIPP TRU Waste Disposal

- WIPP Land Withdrawal Act (LWA)
- Defense generated transuranic
- Must meet WIPP Waste Acceptance Criteria
- WIPP transuranic waste capacity 6.2M ft³
 - Current volume capacity filled = 2.7M ft³ (~44%)



WIPP transuranic waste capacity
(cubic feet)



■ LWA remaining capacity

Waste Emplacement Update

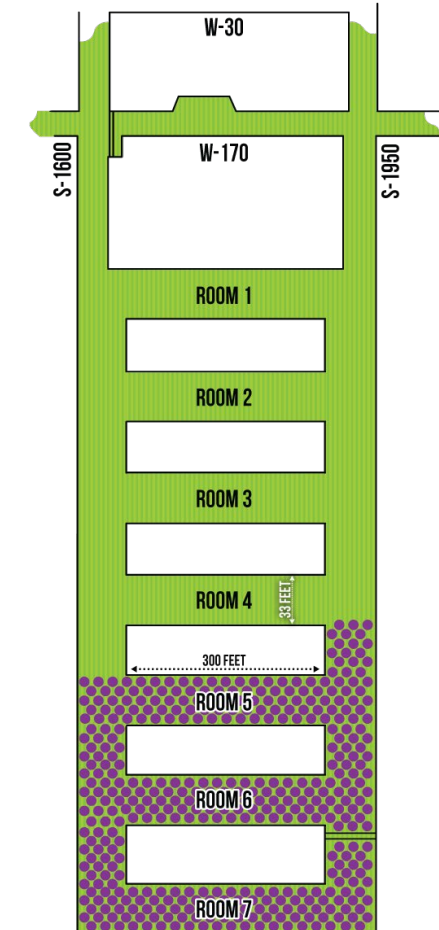
Panel 8, Room 5

- Nearing completion of Room 5 emplacements

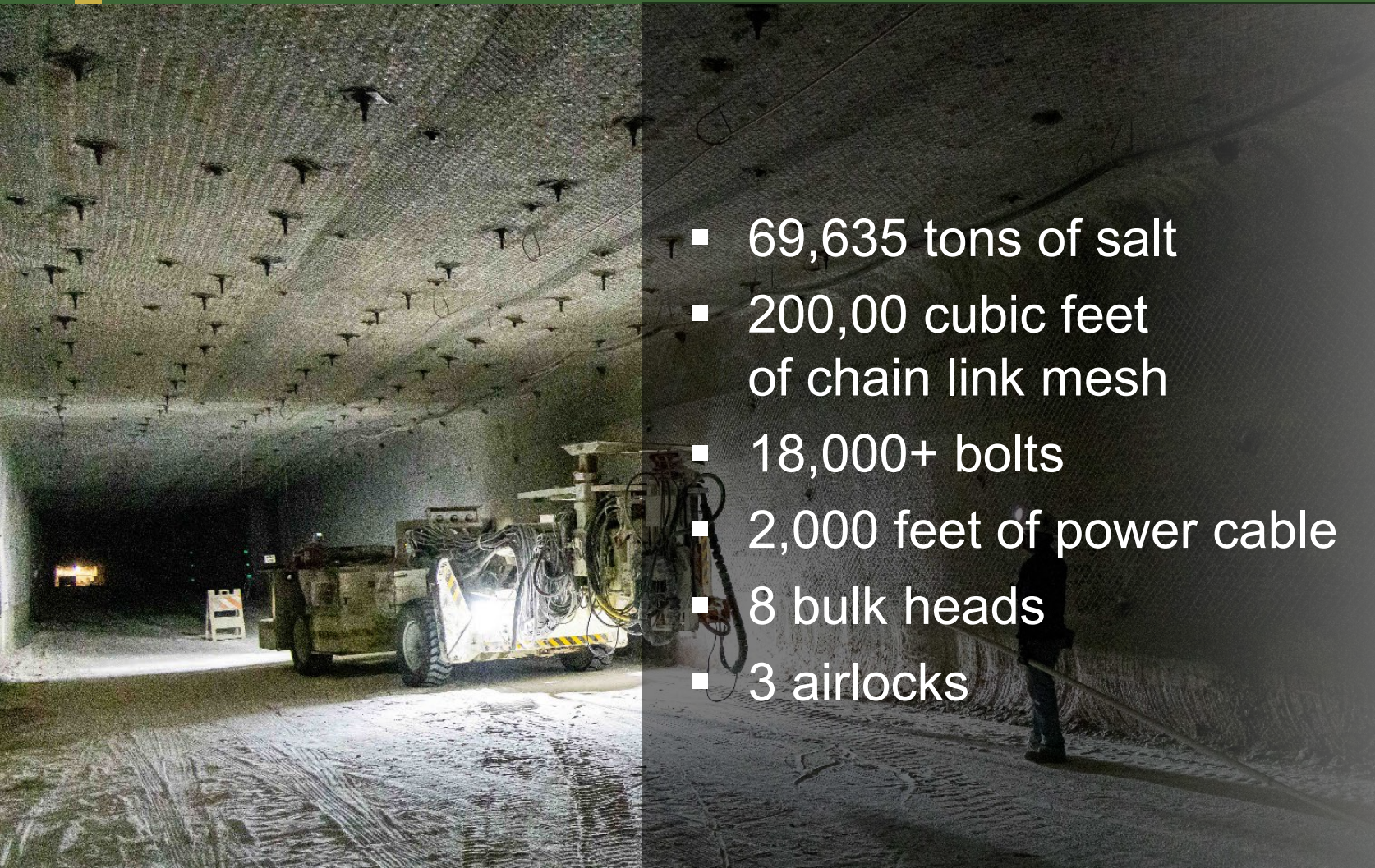


Workers offload waste drums into the underground repository's Panel 8

ENLARGEMENT OF PANEL EIGHT - EMPLACEMENT

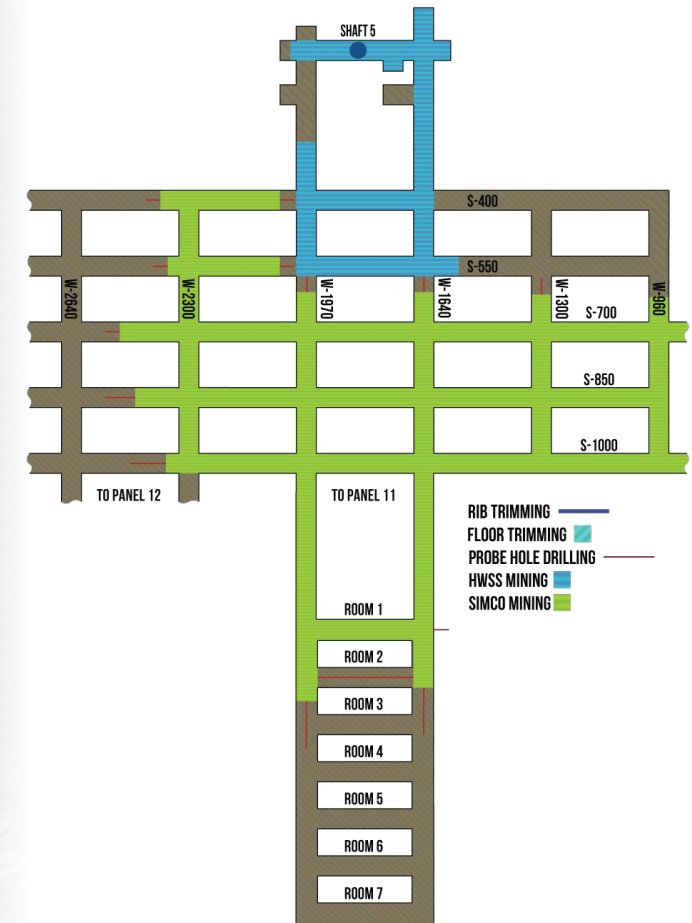


By the Numbers: Equipping the West Mains



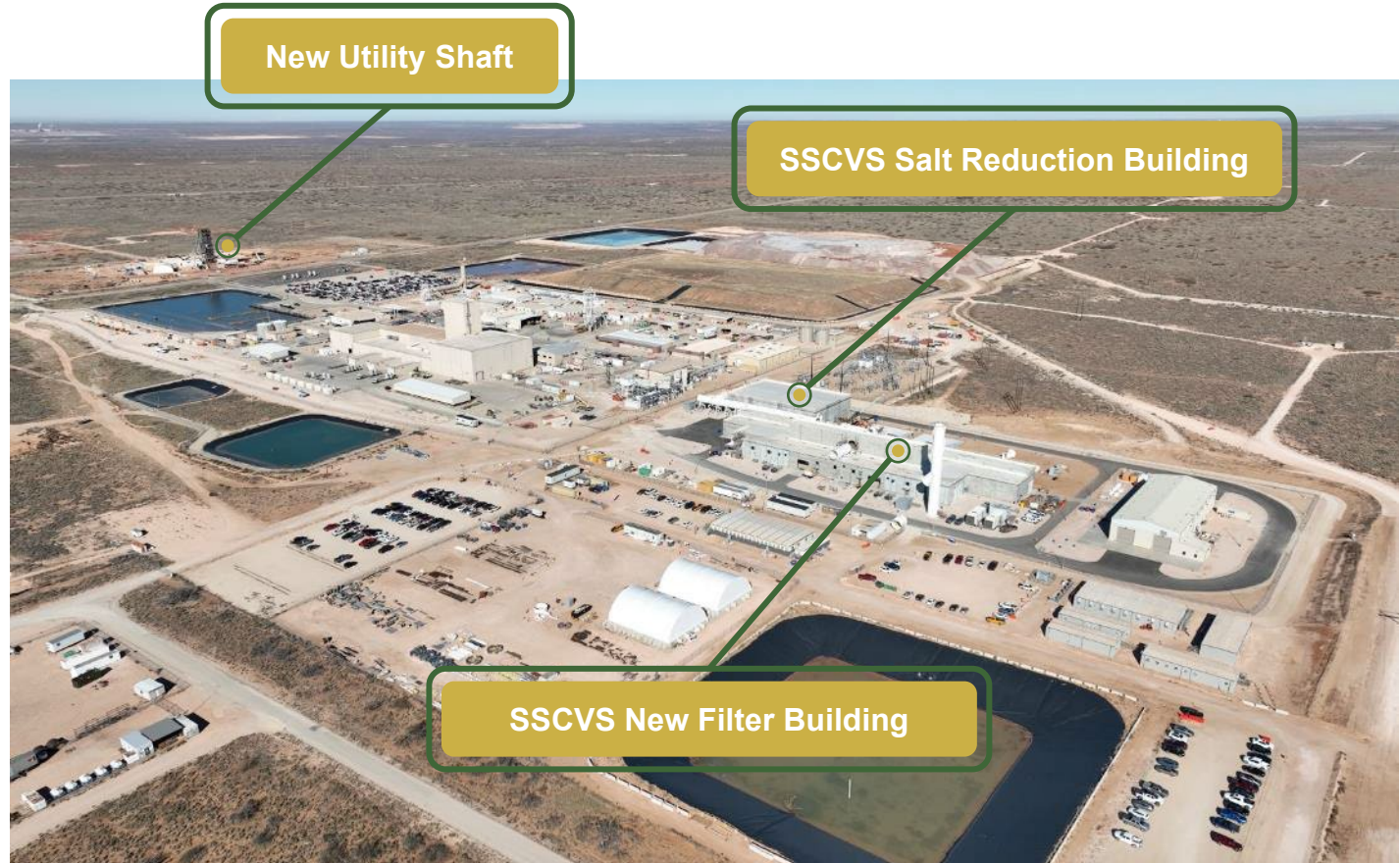
- 69,635 tons of salt
- 200,00 cubic feet of chain link mesh
- 18,000+ bolts
- 2,000 feet of power cable
- 8 bulk heads
- 3 airlocks

MINING TO THE WEST



Infrastructure Investments

- Projects will:
 - Improve reliability
 - Enhance worker safety
- Safety Significant Confinement Ventilation System (SSCVS)
- New Utility Shaft
- Minor Construction Projects



Safety Significant Confinement Ventilation System (SSCVS)

Increasing airflow to the underground up to 540,000 cubic feet per minute

Progress

- Construction and integrated system testing complete
 - New Filter Building
 - Salt Reduction Building
- Operational readiness phase underway
 - Training & qualifying operators, integrating procedures, facility test runs
- On pace to be operational in 2026



Above: Filter banks inside the SSCVS New Filter Building
Inserts: Filter fan control panel (above), systems testing (below)

New Utility Shaft and Plant Upgrade Projects



An underground continuous mining machine prepares to mine salt at the new utility shaft



Work begins in the WIPP underground to refurbish the salt loading pocket infrastructure

■ New Utility Shaft Project

- Providing higher-capacity air intake for the underground in conjunction with SSCVS
- Shaft sinking and station development complete, horizontal connection to mine anticipated in January 2025

■ Other Plant Projects

- Salt pocket refurbishment project underway
- Planning for future hoisting upgrades and capabilities

Safe Transportation

- Received **490** shipment in FY2024
- Averaging 10 – 12 shipments/week
- Total shipments received
 - **14,234**
- Total loaded miles traveled
 - **17,0089,502**
- FY24 shipping totals:
 - ANL 4
 - INL 365
 - LANL 49
 - LLNL 1
 - ORNL 12
 - SRS 59





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QUESTIONS?

