



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

WASTE ISOLATION PILOT PLANT

Council of State Governemtns Midwest

October 2024

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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
- **14,169** shipments received
- **17 million** safe loaded miles traveled
- **376** shipments received and emplaced in 2024



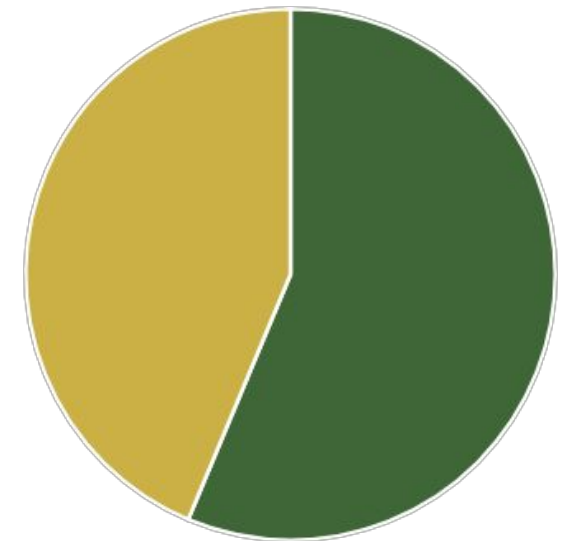
As of October 1, 2024

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
- Current Capacity

Waste Emplacement and Mining Update

Panel 8, Room 5

- Room 6 filled, completed in April
- Began Room 5 emplacement

New Panel 11

- Panel 11 mining began December 2023
- Reached Panel 11, Room 1 in April
- Mining activities continue



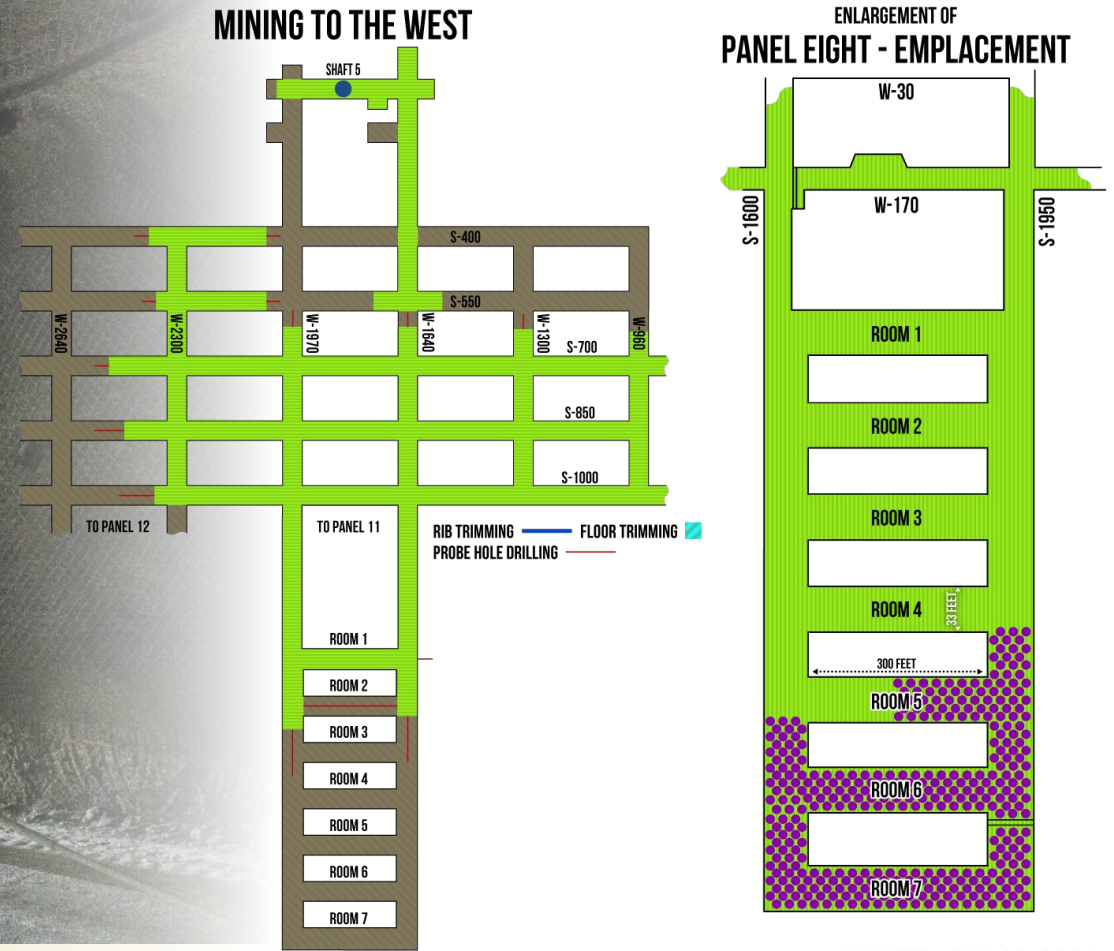
Above: Underground bolting in the West Mains

Below: Panel 8 waste emplacement

Underground West Mains Mining Progress



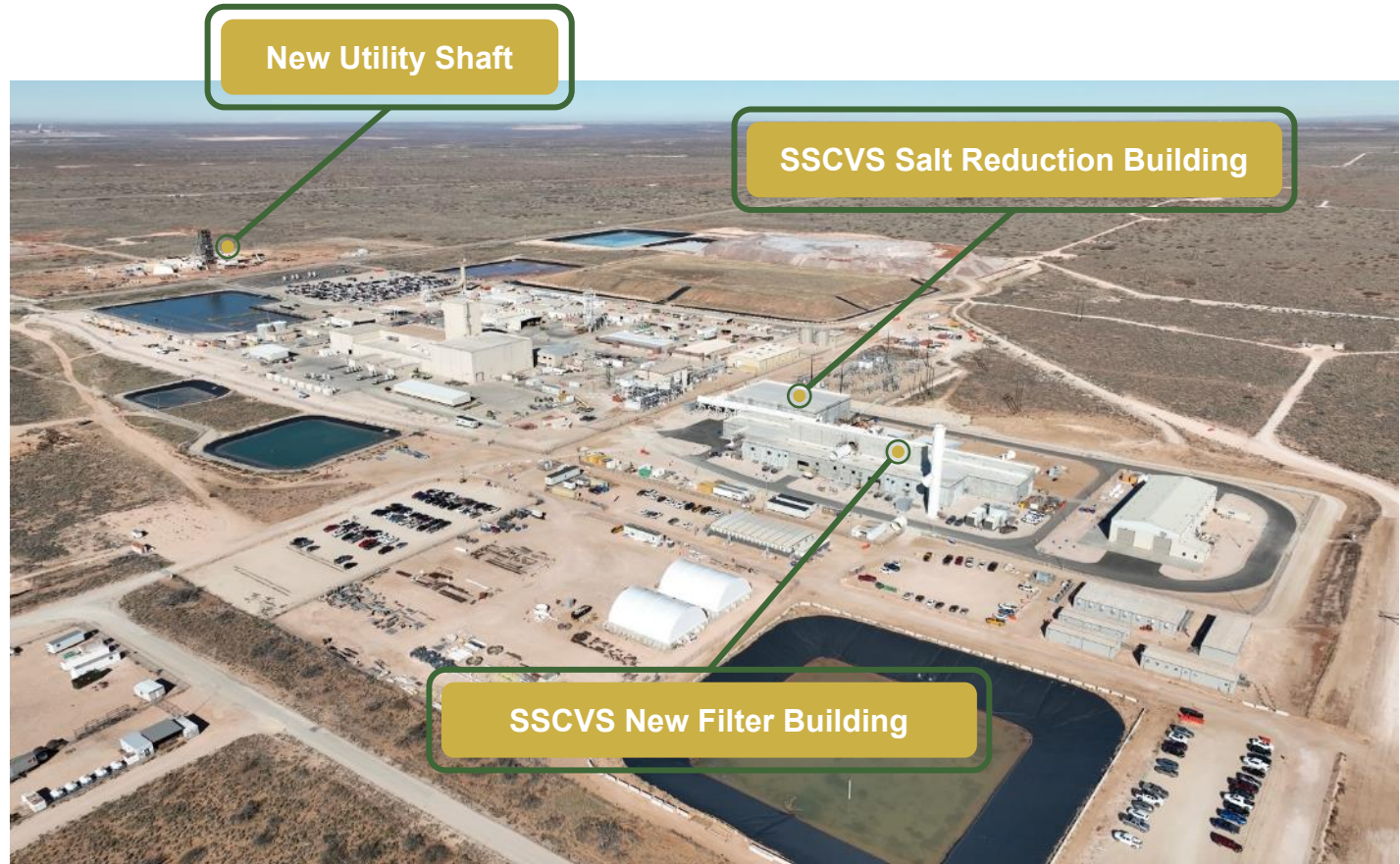
Above: Mining progress in the WIPP underground West Mains



UPDATED: JULY 22, 2024

Infrastructure Investments

- Projects will:
 - Reduce maintenance down time
 - Improve operational efficiencies
 - Enhance worker safety
- Safety Significant Confinement Ventilation System (SSCVS)
- New Utility Shaft
- Minor Construction Projects



Capital Project Safety Significant Confinement Ventilation System (SSCVS)

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

Progress

- Construction completed in late May
- Overall project about 91% complete:
 - New Filter Building (NFB)
 - Salt Reduction Building (SRB)
- Rigorous systems testing underway
- Overall commissioning is on pace to be operational in 2026



Above: Equipment testing during SSCVS commissioning
Below: SSCVS final large duct work installation

New Utility Shaft and Plant Upgrade Projects



Lowering mining equipment down the new Utility Shaft

- New Utility Shaft Project
 - Providing higher-capacity air intake for the underground in conjunction with SSCVS
 - Shaft sinking and station development complete, horizontal drifts excavation underway
- Other Plant Projects
 - Salt pocket refurbishment project
 - Hoisting maintenance and upgrades

Safe Transportation

- Received **490** shipment in FY 2024
- Averaging 10 – 12 shipments/week
- Total shipments received
 - **14,169**
- Total loaded miles traveled
 - **17,004,207**
- FY24 shipping totals:
 - ANL 4
 - INL 365
 - LANL 49
 - LLNL 1
 - ORNL 12
 - SRS 59

As of 10/01/2024





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QUESTIONS?
