



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**

WIPP Looking Forward Waste Management 2017

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018 Panel: US DOE WIPP: Lessons Learned and Return to Operations
Following 2014 Operational Incidents

March 6, 2017

Near-Term and Long-Term

- **Near-Term (next 12 months)**
 - Waste emplacement operations in Panel 7
 - Development of 12-month shipping estimates
 - Preparation for shipping – outreach along shipping corridors
 - Withdrawal from far south end of the WIPP underground
- **Long-Term (1 to 5 years)**
 - Additional Surface Storage
 - New - air intake shaft
 - New safety significant permanent ventilation system
 - Conceptual model for additional disposal area

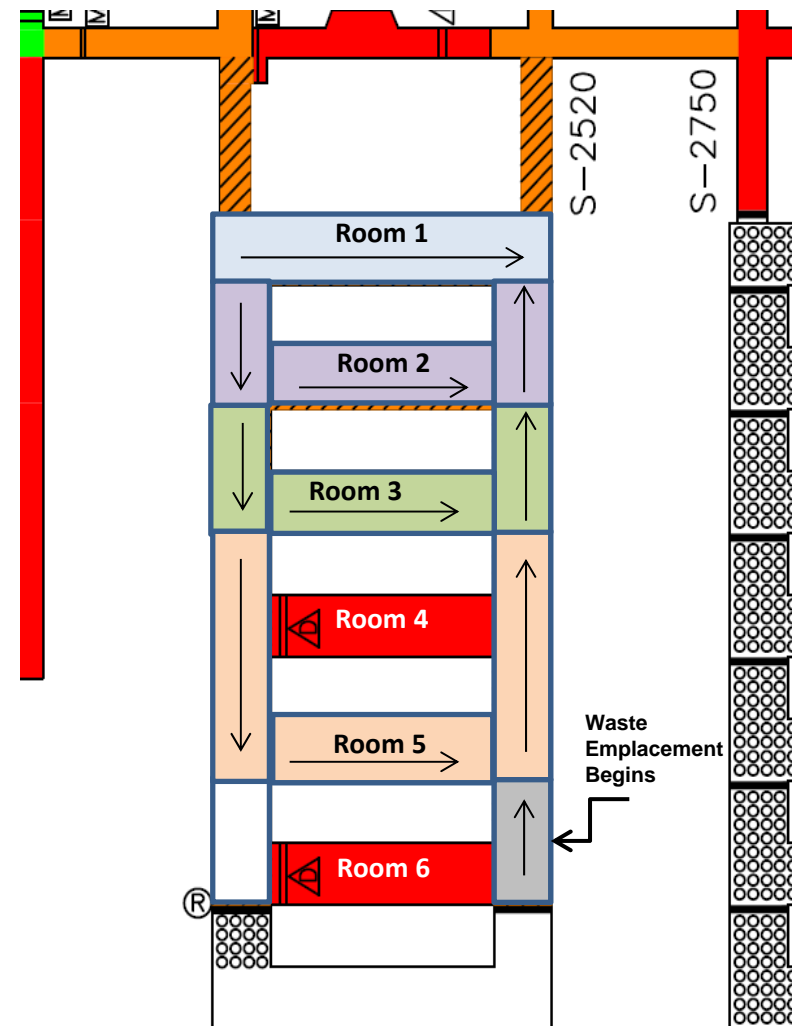
Reopening Event

**WIPP Officially Reopened with a ribbon cutting ceremony held
on January 9, 2017**



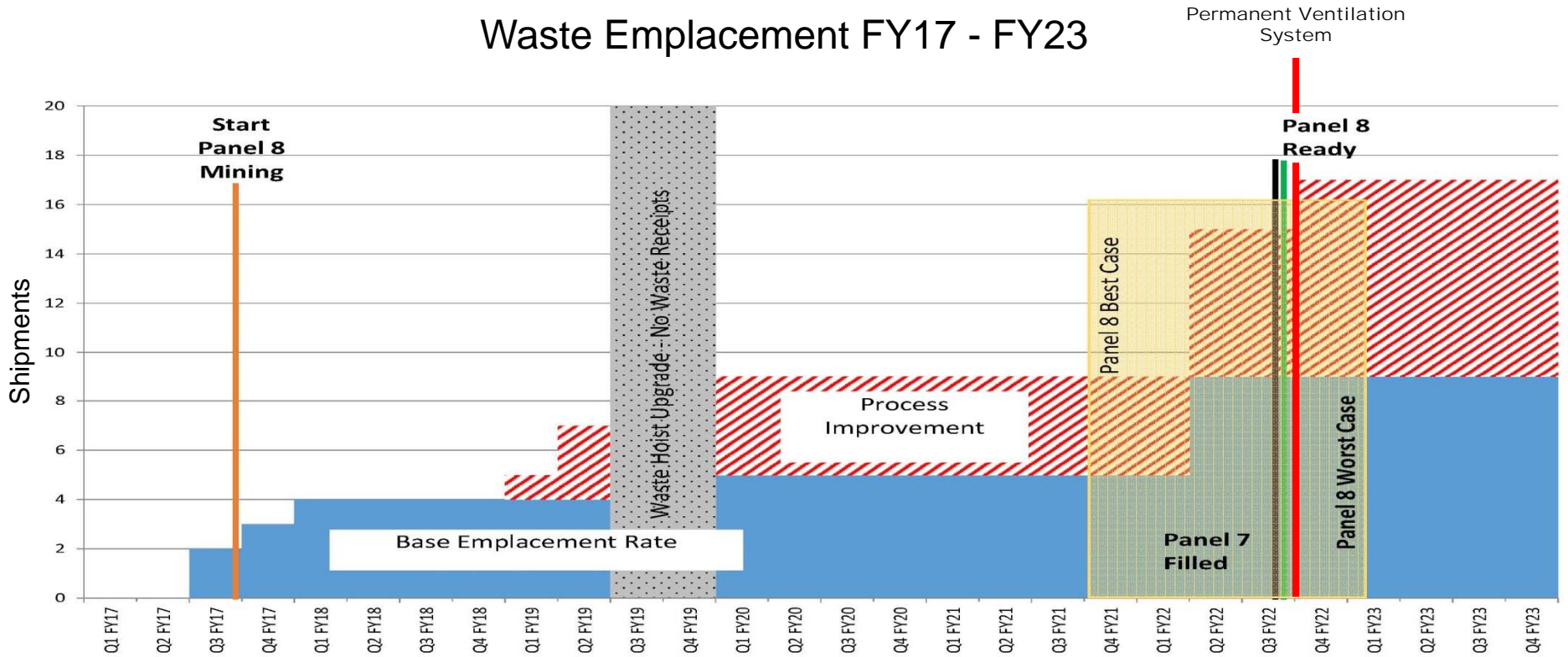
Panel 7 Status

- Location of the February 2014 radiological event (Room 7) – remains closed
- Rock fall in Room 4 on November 3 - room was already prohibited
- Room 6 is also prohibited, but no rock fall is currently anticipated
- Exceptional progress in bolting to make rooms 1, 2, 3 and 5 safe and usable for waste emplacement
- Waste emplacement has started in S2520 moving west to east
- Currently available disposal capacity in Panel 7 should last approximately 3 years, depending on shipping rates



Waste Emplacement and Mining Model

Waste Emplacement FY17 - FY23



Shipping Status

Shipments will resume soon –

- Shipments expected to resume in April at a rate of 2/week – ramping up to 4/week by the end of 2017.
- WIPP anticipates receipt of approximately 128 shipments between April of 2017 and the end of January 2018
- The first group of shipments is expected to be received from Waste Control Specialists, Idaho and Savannah River
- The second group will be from Oak Ridge and Los Alamos National Laboratory
- A new carrier contract is will be announced soon



Preparing Shipping Corridors

WIPP is working with State Regional Groups and Tribal Representatives to ensure transportation corridors are prepared for the resumption of shipments. Outreach activities include –

- Pre-shipment communications, road shows and outreach for active transportation corridors
- Pre-shipment “dry runs” for each corridor to test notification, monitoring, inspections and other enroute procedures



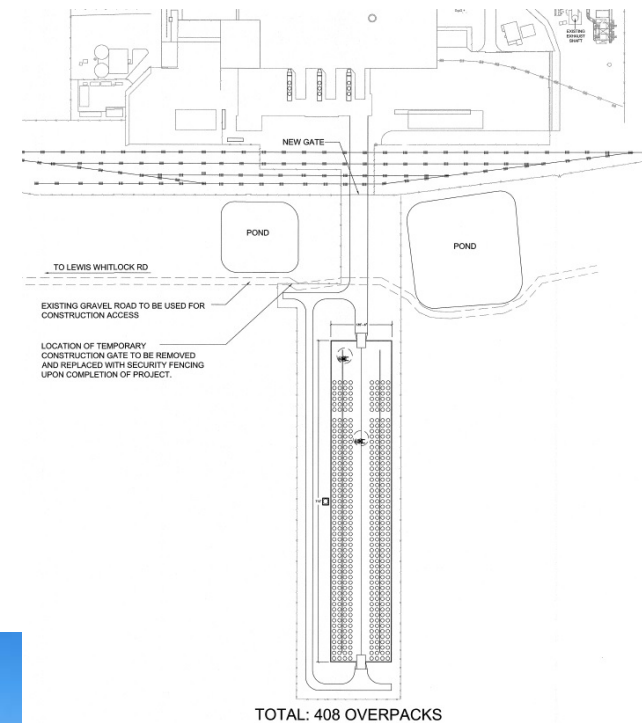
Withdrawal from south end of mine

- Necessary to address worker safety issues and allows crews to focus on active areas of mine
- Plan was developed to address initial construction of ventilation barriers and barricades in E300, E140, W30 and W170 north of S2750 to prohibit personnel access
- Eventual closure of the far south end will not affect WIPP's overall disposal capacity and will not impact preparations or the schedule for waste emplacement



Above Ground Storage

- Engineered concrete overpacks system similar to system used at SRS
- Capacity for 408 containers/136 shipments of CH-waste – 8-weeks of storage
- Increases available weeks for TRU waste shipments allowing continued waste receipt during mining and maintenance outages
- Storage limited to a period of 1 year
- Permit modification submitted to NMED at end of September
- Public meetings held in Santa Fe, 10/25 and Carlsbad, 10/27
- Operational in 2019



New Ventilation Shaft –

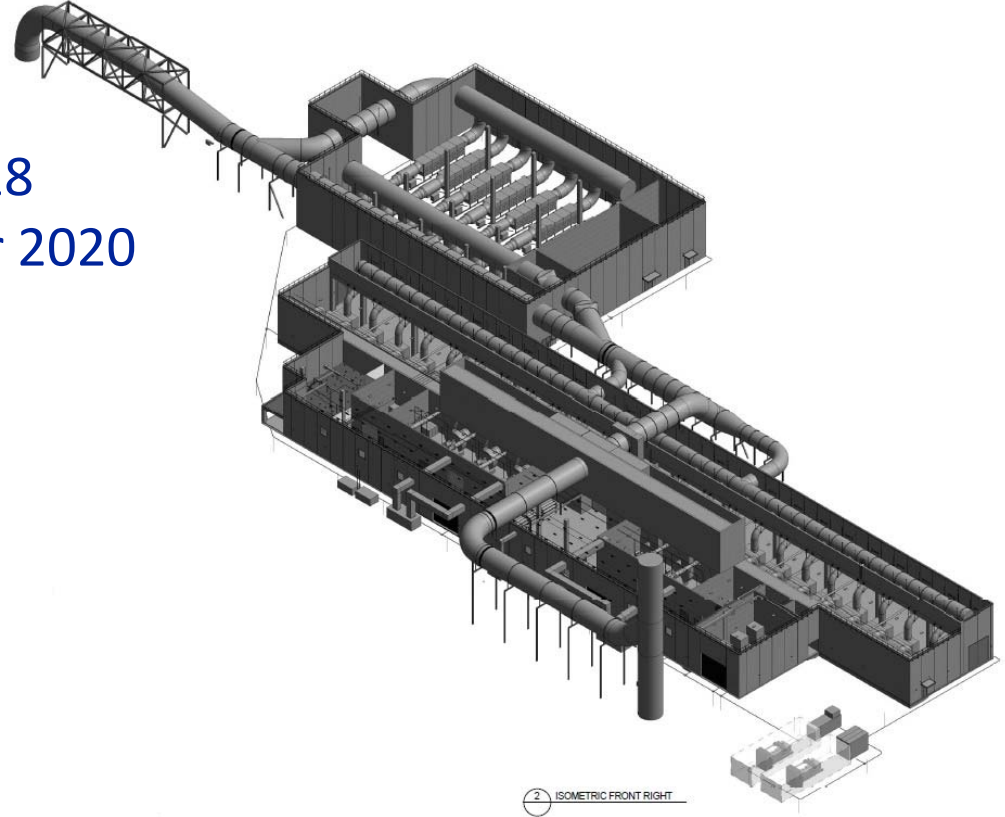
- Located across the access road from the WIPP parking lot
- Using top-down drilling method
- Geotechnical core drilling is currently in progress
- Critical Decision (CD) 2/3 expected in March 2018
- CD 4 expected in December 2020



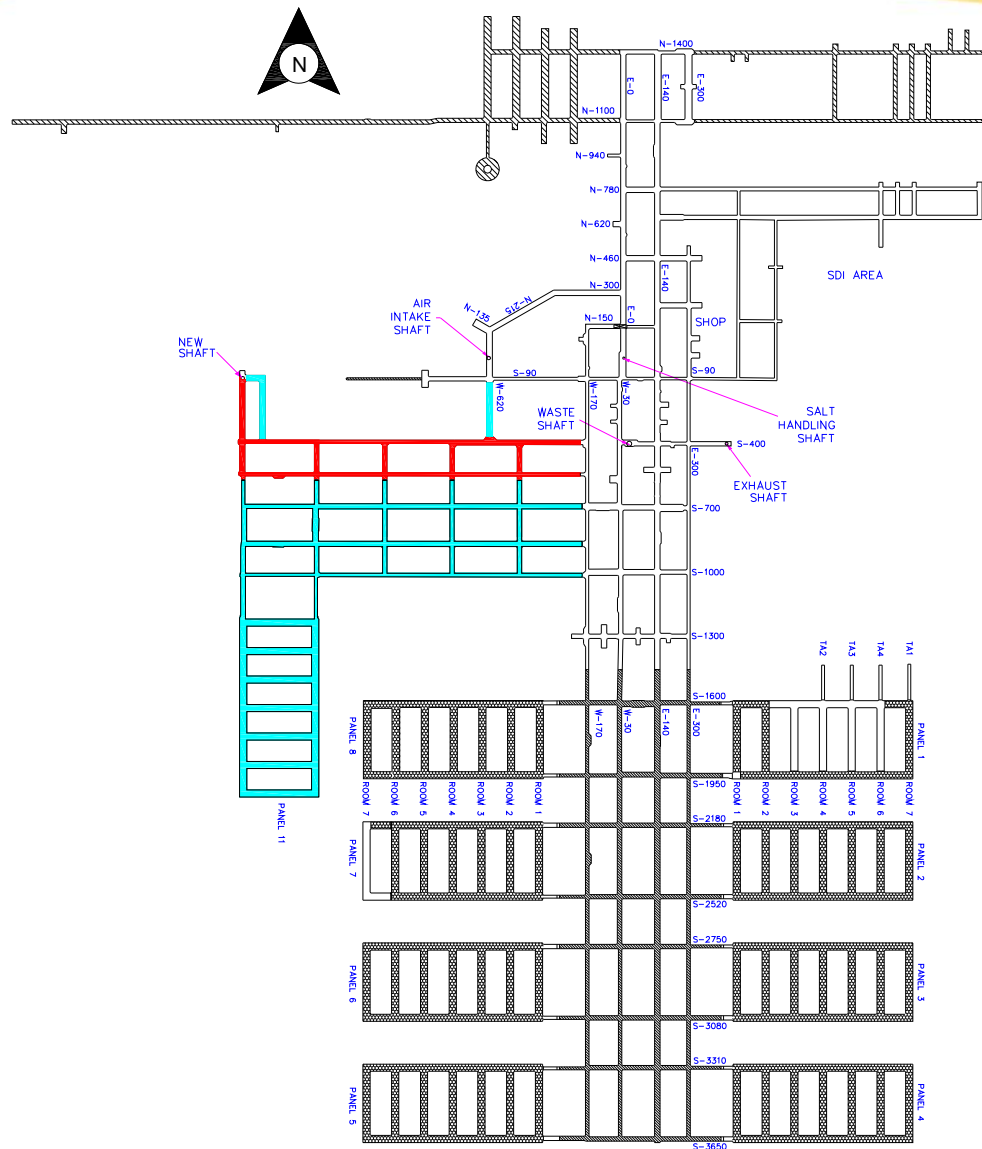
New filter building -

New safety significant confinement system connected to the existing exhaust shaft through a salt reduction facility and then to a new Filter Building with HEPA Filters and Exhaust Fans -

- Currently at 90% Design
- CD 2/3 is expected in March 2018
- CD 4 expected December 2020



Conceptual Model of WIPP Footprint



- New ventilation shaft is located west of existing waste panels and west of the existing facility – well within 16 square mile WIPP exclusion area
- Drifts will need to be mined out to the new shaft
- Panels could be added in a variety of ways

Questions & Answers

