The Council of State Governments
Midwestern Radioactive Materials Transportation Committee

December 2, 2021
WIPP’s Critical Mission

- WIPP opened in 1999 and has now operated for more than 20 years
- Enabled clean up of 22 legacy TRU waste sites throughout the U.S.
- Remains a cornerstone of DOE’s ongoing cleanup efforts
- Recapitalization and critical infrastructure upgrades are underway
- 2,150 feet deep
- Disposal panels
- Four vertical shafts
- Ventilation
- North Experimental Area
FY21 Major Accomplishments

- Shipments: 199
- Loaded shipping miles: 224,304
- Mining in panel 8 complete
- Salt reduction building walls
- 700-C fan balancing complete
- Central Monitoring Room upgrade
- Approval to resume work on underground Shaft #5
Over 13,000 shipments received
Over 15.5 million loaded safe miles traveled
Averaging 5-7 shipments per week
Consistent shipments from
- Los Alamos National Laboratory
- Idaho National Laboratory
- Savannah River Site

Safe Transportation
Panel 7 Emplacement Status

Room 2 Projected fill date: January 6, 2022
Panel 7 Projected fill date: July 26, 2022
Mining completed
- 09/29/2021

Outfitting completion date
- 02/15/2022

Class 2 Permit Modification Request – Update Volatile Organic Compound Room Based Limits
- Submitted 10/15/2021
- Decision Expected by 2/15/2022

Expected New Mexico Environment Department Certification & Ready for Emplacement
- 4/30/2022
Mining Progress

- Began mining drifts to the west on September 26th, meeting EM calendar year 2021 goals
- Achieve continuous mining to the west on 03/31/2022
- Widen access drift to Panel 8
- Prepare access drifts for panel 11 emplacement
  - W170 drift widened from S550 – S850: Began 10/15/2021
  - W170 Floor removal from S90 – S850: Began 10/27/2022
700-C Fan Restart Status

- Bringing the 700-C legacy fan (unfiltered) online will increase airflow in the WIPP underground during non-waste handling operations
  - Increased comfort to our workforce
  - The 700-C fan will act as a bridge until the SSCVS is online
- We have successfully conducted the initial 4 hour startup test
- Environmental monitoring data shows no impact to human health or the environment
- Next Steps Restarted (balancing) October 26th
- 700-C fan will not operate during waste emplacement activities
- Approximately half of the data has been evaluated from the 40 hour sampling period for 700-C Fan restart. At this point, the Radiological data is well below the pre-established limits in the Sampling plan.
- https://wipp.energy.gov/700c-restart.asp
Safety Significant Confinement Ventilation System (SSCVS)

- The SSCVS will increase air volume flow throughout the underground, allowing for improved working conditions and increased worker comfort.
- Total project expected to be operational in 2025.
SSCVS - New Filter Building

- Safety Significant slab-on-grade concrete placements: Completed August 4, 2021
- Safety Significant cast in place concrete wall placements commenced, 50 of 153 cast as of October 22, 2021.
- Received all 22 HEPA Filter Units to Site that will be installed in the New Filter Building
The walls and roof on the Salt Reduction Building are scheduled for completion by the end of the year. Work on the walls of the New Filter Building continues.
SSCVS - Salt Reduction Building

- Completed all concrete housekeeping pads
- Have received all 6 of the Salt Reduction Units to Site
- Walls and roof have been installed
Utility Shaft Sinking

- New air intake shaft, allowing for a separate mining circuit reducing the salt load on the Safety Significant Confinement Ventilation System

- Completed the installation of the plenum, associated ductwork and the completion of the shaft liner to the underside of the temporary collar
Utility Shaft

- Completed the Infrastructure
  - #5 Salt Pond & Salt Pile
  - Power feed
  - Fire Loop
  - North Access Road Bypass
- Completed excavation of the Exhaust Stack plenum to 20 feet below ground elevation and placed the concrete for the bottom, east and west plenum sides.
- Commenced installation of Exhaust Stack ductwork structural supports and saddles.
- Key Milestone dates
  - Resume shaft sinking: August 2022
  - Install Galloway and erect headframe
    - Install Galloway begins: May 2022
    - Head frame complete: May/June 2022
Class 3 PMR, Excavation of New Shaft and Associated Connecting Drifts

- Class 3 PMR approved on October 27, 2021

Ground Water Discharge Permit DP-831

- Public Hearing held September 7-8, 2021
- Findings of fact, conclusions of law and closing arguments submitted October 19, 2021
- Decision on permit modification request anticipated in early 2022
General Plant Projects

- Fire Protection
- Electrical Upgrade
- Air Line Replacement
- New Compressors
- Salt Hoist Refurbishment
WIPP has a variety of electric vehicles in its fleet including continuous miners, forklifts and hybrid bolters. Currently there are 17 fully or partially electric vehicles/mobile equipment in the WIPP underground with plans to buy 12 more this year.
Plans for RH Bore Hole Emplacement

The RH borehole emplacement approach, which we call traditional emplacement, has initiated a startup evaluation. The evaluation is comprised of various system and equipment operational tests. The plan is as follows:

- Initial system and equipment reviews
- System equipment repairs, refurbishments, replacements, procedure revisions and developments
- Training, qualifications, testing and operational checks
- Preparations for operational readiness and preparations for first shipment at site
Questions?

For More Information:
https://wipp.energy.gov
1-800-336-WIPP (9477)