U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

WIPP Recovery Status Update

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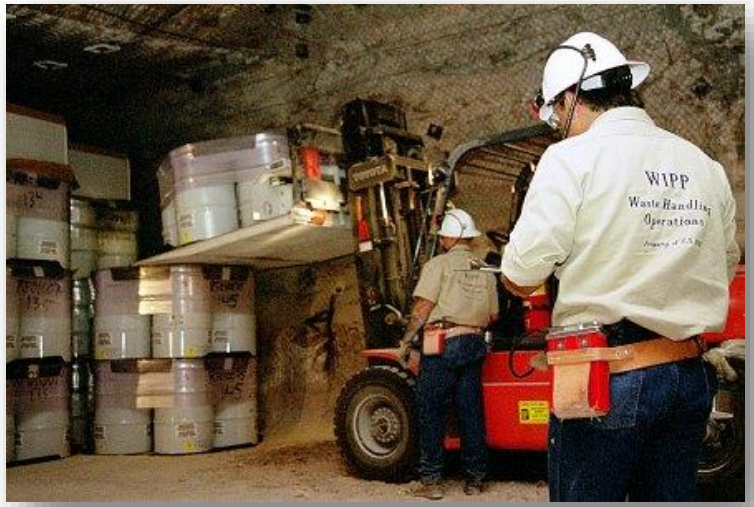
WIPP's 15-year History

11,894	Shipments received
33,000	Type B packages unloaded
91,000	Cubic meters of TRU waste disposed
14,200,000	Loaded miles



Recap of the Incidents at WIPP

February 5, 2014 Truck Fire:

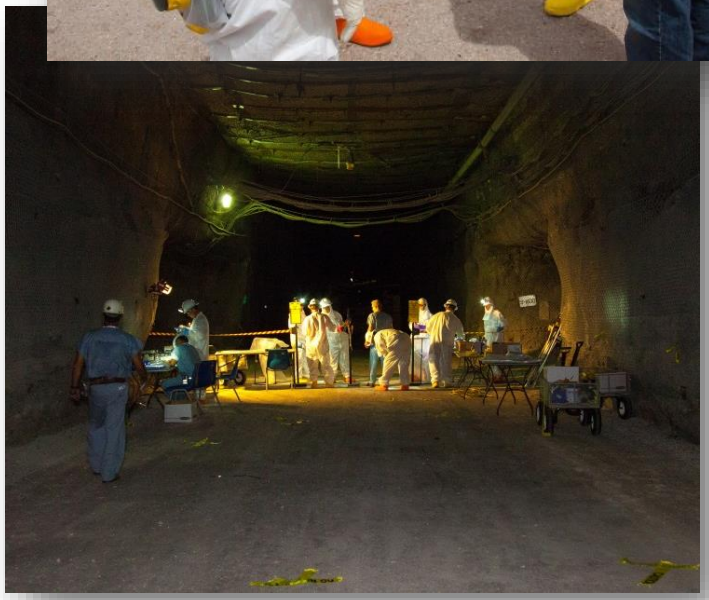
- All operations at the repository ceased following salt haul truck fire in the WIPP underground
- An investigation team deployed to determine the cause of the fire

February 14, 2014 Radiological Incident:

- A continuous air monitor detected airborne radiation in the underground
- WIPP's ventilation system automatically switched to high-efficiency particulate air (HEPA) filtration mode when airborne radiation was detected
- Underground and the WIPP mine remains in filtration mode at this time
- Extensive sampling and monitoring conducted by DOE, New Mexico, and Carlsbad Environmental Monitoring Research Center Monitoring.
  - EPA and the NMED also performed sampling

Key Recovery Steps toward Resumption of Operations

- **Documented Safety Analysis Revisions**
- **Safety Management Program Revitalization**
- **Underground Restoration**
  - Re-Establish Degraded Equipment
  - Fire Protection
  - Maintenance and Ground Control
  - Radiological Roll-back
  - Soot cleaning of electrical panels
- **Expedite mine stability**
- **Initial Closure Panel 6 and Panel 7, Room 7 Interim Ventilation**
- **Supplemental Ventilation Modifications**



Contamination Mitigation

Fresh-water wash effective in removing/encapsulating contamination

- ~20 l/m (2 gal/ft.)
- >95% removal (first pass)Resulting contaminated brine trapped within the rock

WIPP procured new equipment to mitigate contamination

- Spray cart
  - Applies a water mist to stabilize and encapsulate the radioactive particles into the salt
- HEPA vacuum system
  - Used to capture loose contamination that has not been encapsulated into the salt

Initial Panel Closures

Initial panel closure activities completed:

- Panel 6 (May 11)
- Panel 7, Room 7 (May 29)

All suspect nitrate salt containers of concern disposed in the WIPP underground are now isolated

Ventilation

Current Status

- Ventilation in Filtration Mode
  - 60,000 cfm of filtered air
- Note: WIPP's standard (unfiltered) operational airflow is 425,000 cfm

Recovery Actions

- **Phase I** – HEPA skid and fan unit
  - 114,000 cfm of airflow
- **Phase II –** Reconfiguring mine circuits and additional fans
  - 180,000 cfm airflow
- **Phase III** – Design and construct a new (permanent) ventilation system
  - Capable to provide 420,000 cfm

Looking Ahead

- Complete interim ventilation
- Complete Operational Readiness Reviews
- Resume waste emplacement 2016

Idaho Impacts

- While we cannot ship transuranic waste, we continue to retrieve, characterize and certify waste at the Advanced Mixed Waste Treatment Facility. We currently have 665 equivalent shipments of certified contact-handled TRU waste containers that can be shipped once WIPP resumes operations. We have the equivalent of 57 certified shipments of remote-handled TRU ready to ship.
- In addition, we continue to ship waste that is determined to be mixed low-level waste to disposal sites in Nevada and Utah.
- It is unknown when we will be able to resume shipments to WIPP from Idaho.