



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

Waste Isolation Pilot Plant Recovery Update and Path Forward

Brad Bugger

Idaho National Laboratory Citizen's Advisory Board
November 19, 2014

Recap of the Incidents at WIPP

February 5th Truck Fire:

- All operations at the repository ceased following salt haul truck fire in the WIPP underground.
- An investigation team was deployed to determine the cause of the fire.
 - Report released March 13th.

February 14th 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.
- Efforts by the DOE and Nuclear Waste Partnership are ensuring workers are fully protected during recovery and restart.
- Town hall meetings are utilized to keep the community informed; to stay apprised go to: <http://www.wipp.energy.gov>
 - Live streaming of the meetings can be viewed at: <http://new.livestream.com/rvv/>

Incidents at WIPP

February 5 Underground Fire



Accident Investigation Board Report

- Completed

February 14 Radiological Release

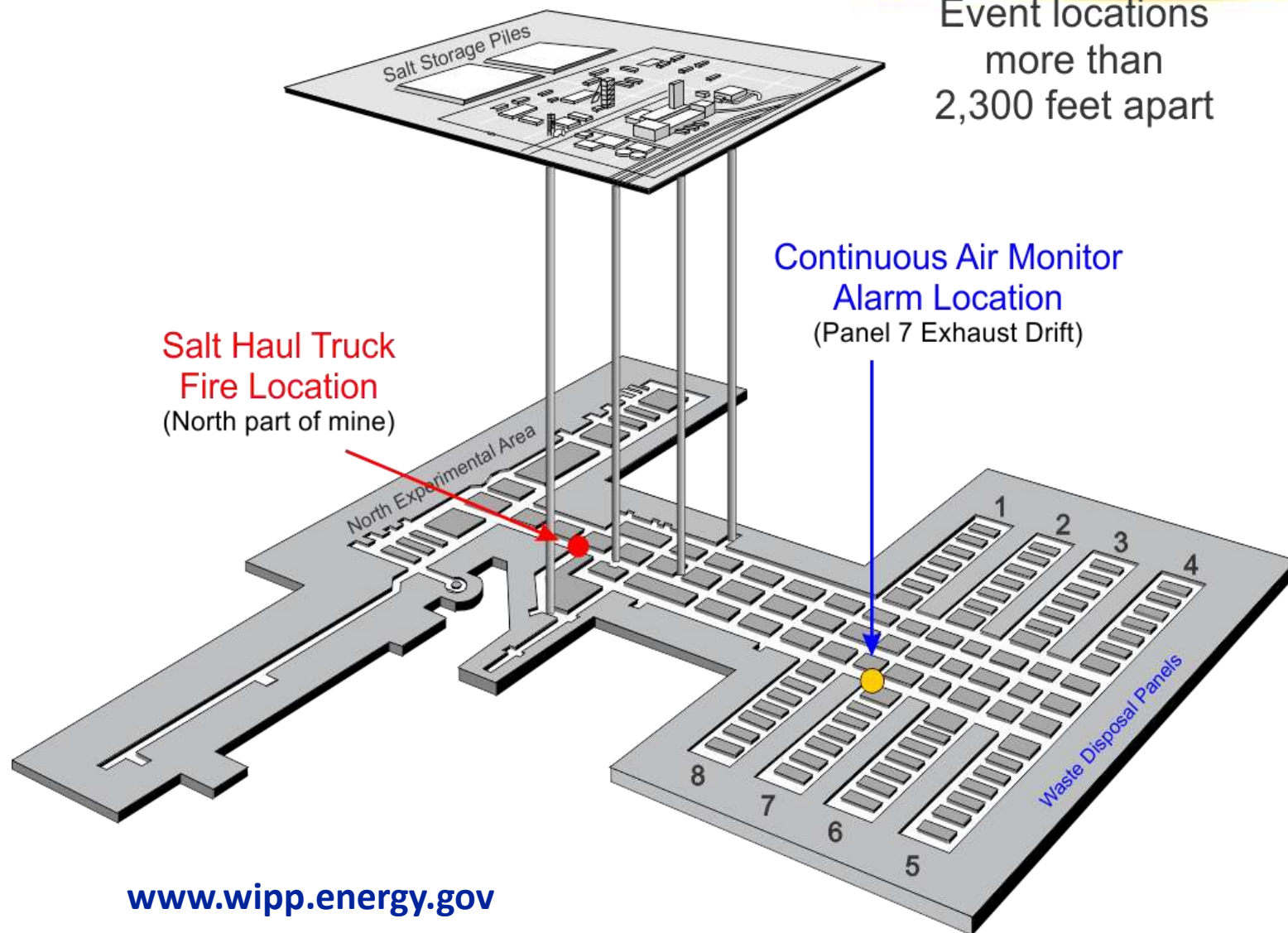


Accident Investigation Board Report

- Phase I completed
- Phase II – in progress

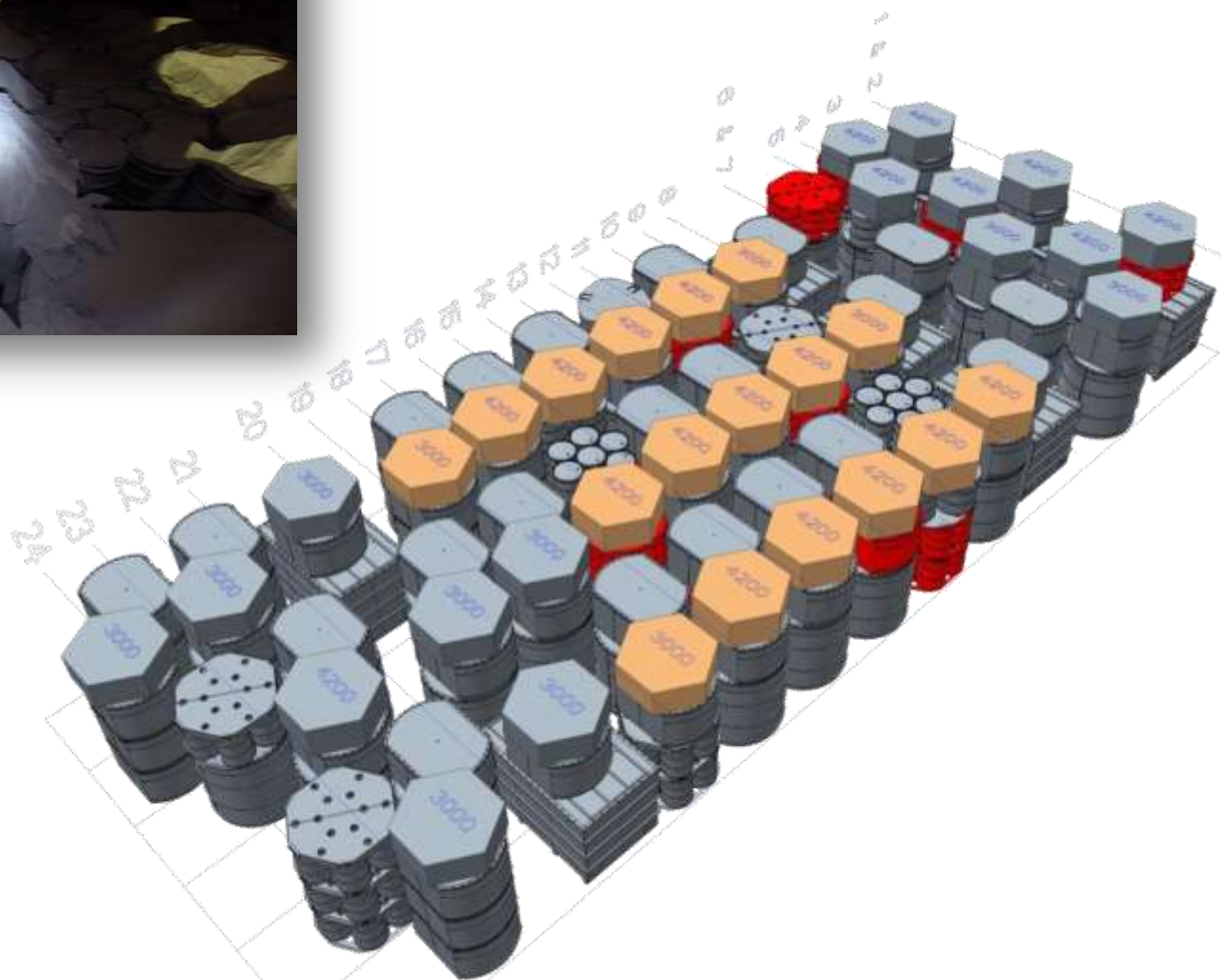
Recap of Incidents: Layout of the WIPP Underground

Event locations
more than
2,300 feet apart



www.wipp.energy.gov

Room 7, Panel 7

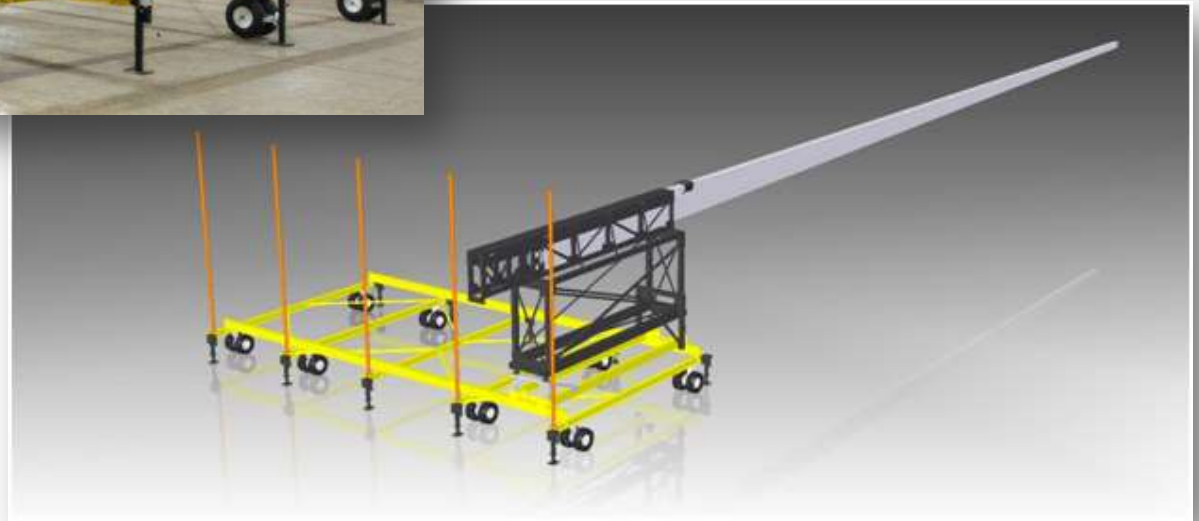


Project REACH



The REACH system will be used to perform photo/video evaluation of remaining waste containers in room 7 panel 7

REACH system has been transported to the WIPP underground



Key Recovery Steps toward Resumption of Operations

- **Nuclear Safety Document Revisions (continuing)**
- **Safety Management Program Revitalization (continuing)**
- **Underground restoration (underway)**
 - Radiological Roll-back
 - Re-Establish Safety Systems
 - Cleanup, Habitability
 - Fire Protection
 - Maintenance and Ground Control
- **Expedite mine stability (resume bolting)**
- **Expedited Panel 6 and Room 7, Panel 7 Closure**
- **Interim Ventilation (procurement underway)**
- **Supplemental Ventilation Modifications (initiated)**
- **Readiness Activities**
- **Limited Operations**
 - On-site waste
 - Off-site waste generators





Mine Stability and Underground Habitability

- **Resumption of bolting – one of the highest priorities**
 - Preventative maintenance activities on equipment completed
 - Roof bolting to begin week of November 10th
- **Waste hoist**
 - Camera inspection of shaft/ropes completed
 - Preventive maintenance and inspections completed
 - Hoist is now operational for transport of equipment – available for personnel near the end of November



Anticipated Approach:

- Contamination will be fixed or sealed to the mine surface.
- Anticipated use of water spray for most areas of low contamination.
 - Will create a crust on salt surfaces.
- Higher activity areas will utilize a spray-on fixative application.
- After application, floors will be covered with a brattice cloth barrier and ~ 4 inches of mined salt.



Panel 6 Closure Plans

- Closure of Panel 6 is a high priority of the WIPP recovery plan
- NMED approved the initial closure for WIPP Panel 6
 - Includes chain-link, brattice cloth, run-of-mine salt and bulkheads



Steel Bulkhead

- **Current Status**

- Ventilation in Filtration Mode
 - 60,000 cfm of filtered air
- Note: WIPP's standard (unfiltered) operational airflow is 425,000 cfm
 - WIPP Permit requires 260,000 cfm

- **Recovery Actions**

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



Recovery Status

- Comprehensive recovery plan – released September 30, 2014 - that puts safety first
- WIPP is making progress on recovery
 - Extensive underground radiological rollback (over 60%)
 - Mine structure evaluation ongoing
 - Panel 6 and Panel 7, Room 7 closure preparations
- The current workforce is being maintained and utilized
 - Cross-training personnel
 - Changing work schedules to support time-critical recovery activities.
 - Performing readiness activities
 - Fostering a nuclear safety culture change.
- WIPP continues to communicate often and transparently throughout this process with -
 - Frequent briefings for regulators and stakeholder groups
 - Regular town hall meetings
 - Weekly WIPP updates

Additional information is available

<http://www.wipp.energy.gov>

1-800-336-9477

or on Twitter: @WIPPNEWS