



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
**ENVIRONMENTAL  
MANAGEMENT**

# Waste Isolation Pilot Plant Recovery Update

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**SRS Citizen Advisory Board Meeting**  
New Ellenton, SC

**January 27, 2015**

# 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 13<sup>th</sup>.

## 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/rrv/>



# Incidents at WIPP

## February 5 Underground Fire



### Accident Investigation Board Report

- Completed

## February 14 Radiological Release

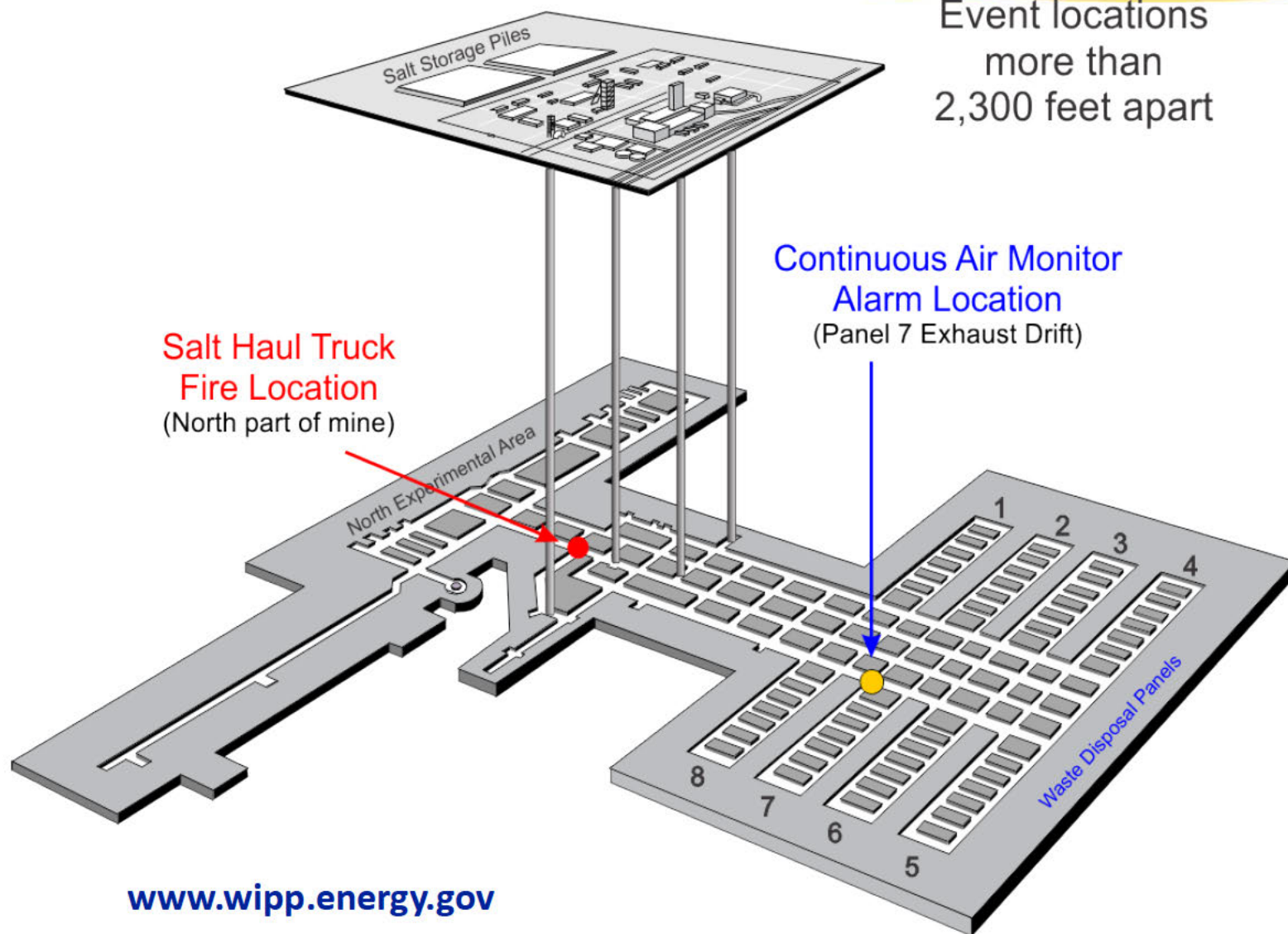


### Accident Investigation Board Report

- Phase I completed
- Phase II – in progress

# Recap of Incidents: Layout of the Underground

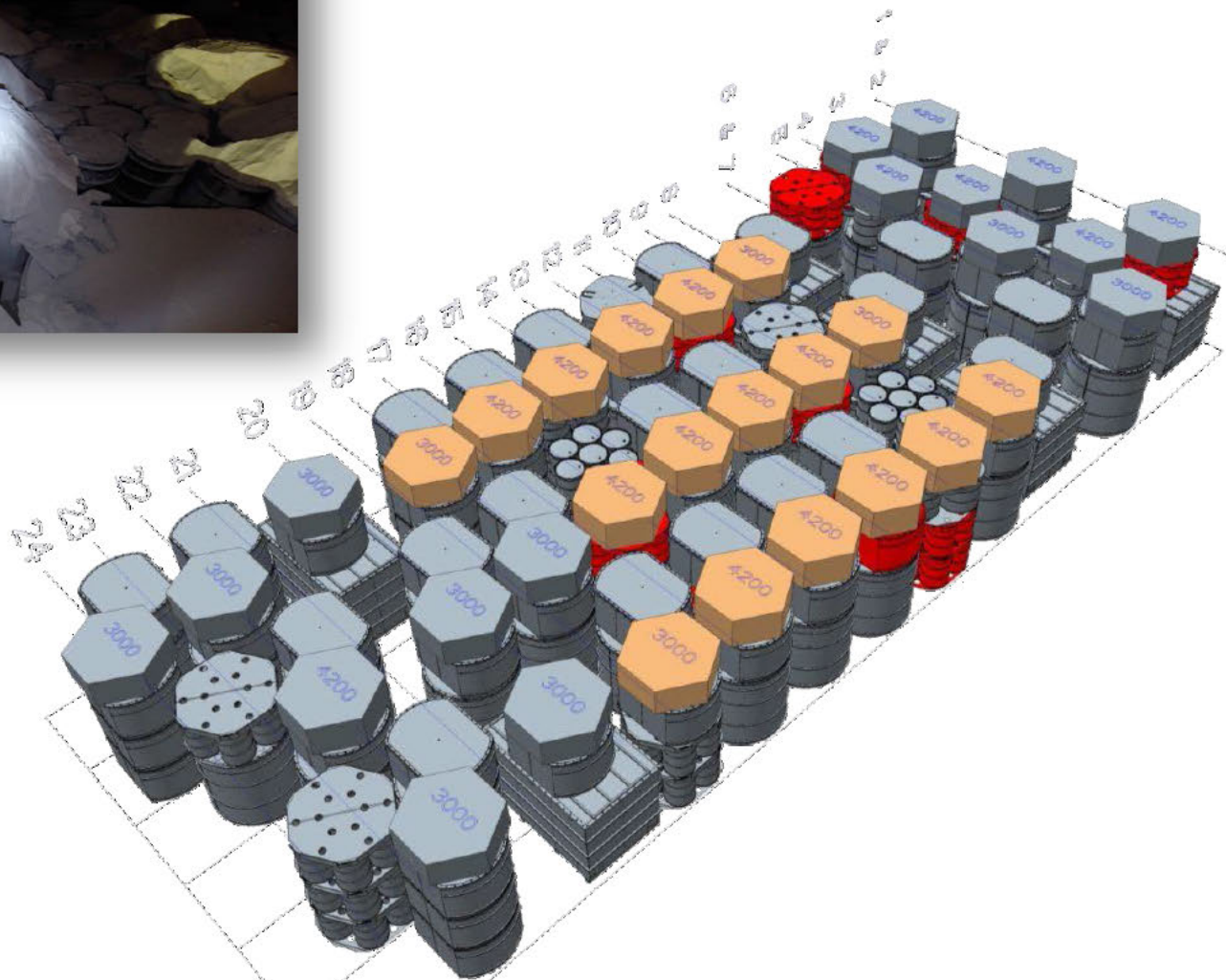
Event locations  
more than  
2,300 feet apart



[www.wipp.energy.gov](http://www.wipp.energy.gov)

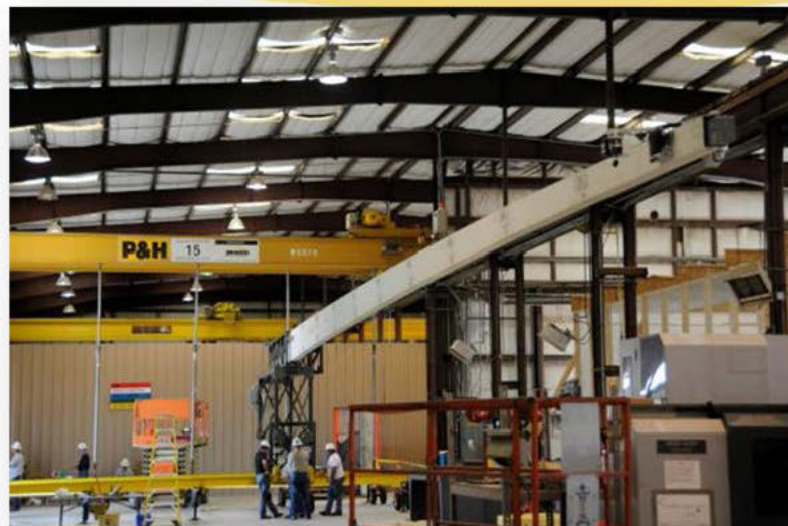


# Room 7 Panel 7 Project REACH



# Project REACH

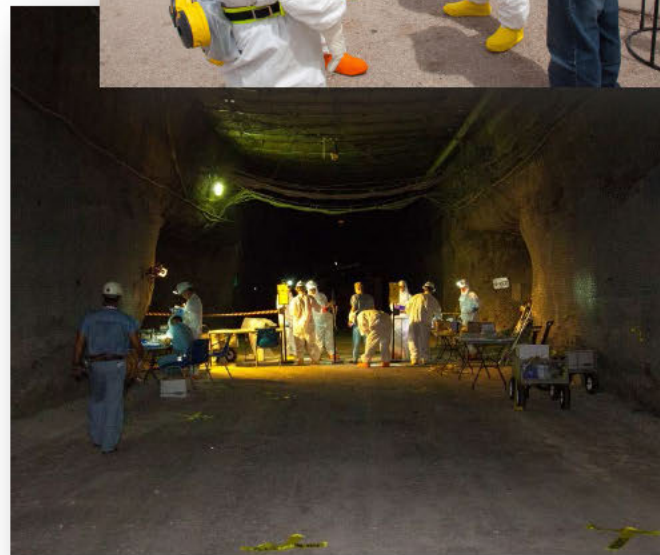
- REACH equipment in place in Panel 7, Room 7.
- Video/photo imaging began the first week of January  
Expected completion in the next month
- AIB team members are on site guiding data collection and reviewing in real-time





# 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)**
- **Initial Panel 6, Panel 7, Room 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/ground control resumed the week of November 10th
- **Waste hoist**
  - Hoist operational for transport of equipment and personnel as of mid-January 2015





# Ground Control



- Bolting activities are completed in the following areas:
  - W-30 S-700 to S-1600
  - E-140 S-700 to S-1950
  - W-170 to E-300 at the S-1600 cross drift
  - Other smaller locations
- Performing a second pass through these areas to complete any additional bolting





# Other Underground Activities

- **Soot cleaning**

- Cleaning of underground electrical panels approximately 65% completed



- **Radiological mitigation plans**

- Two applications have been tested to make contaminated areas useable:
  - Water wash
  - Paint
- Both methods have proven effective in fixing contamination
- Work packages are being developed to begin decontamination activities in Panel 7

11

Figure 10-6 of N 855, Appendix B and the minimum detectable concentration for the instrumentation being used.

Legend:

- CONTROLLED AREA
- RBA
- ESS RESTRICTED AREA
- CONTAMINATION AREA
- HIGH CONTAMINATION AREA/AIRBORNE RADIOACTIVE AREA
- INACCESSIBLE



# Panel Closure Plans

## Closure of Panel 6 and Panel 7 Room 7 is a high priority -

- Panel 6 closure is now planned to be completed by the end of 2<sup>nd</sup> Quarter FY15

## NMED approved the initial closure plans -

- 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

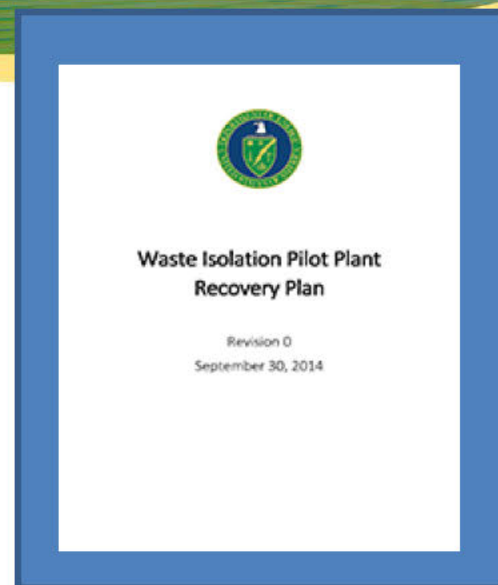
- **Phase I** – HEPA skid and fan unit
  - 114,000 cfm of airflow
- **Phase II** – Reconfiguring airlock and bulkheads and additional fans
  - 180,000 cfm airflow
- **Phase III (not needed for limited operations in early 2016)** – Design and construct of new (permanent) ventilation system
  - Capable of providing 420,000 cfm





# Recovery Status

- WIPP Recovery Plan – released September 30, 2014
  - that puts safety first
- Approval of PMB – January 2015
- WIPP is making progress on recovery
  - Extensive underground radiological rollback – over 60% controlled area
  - 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