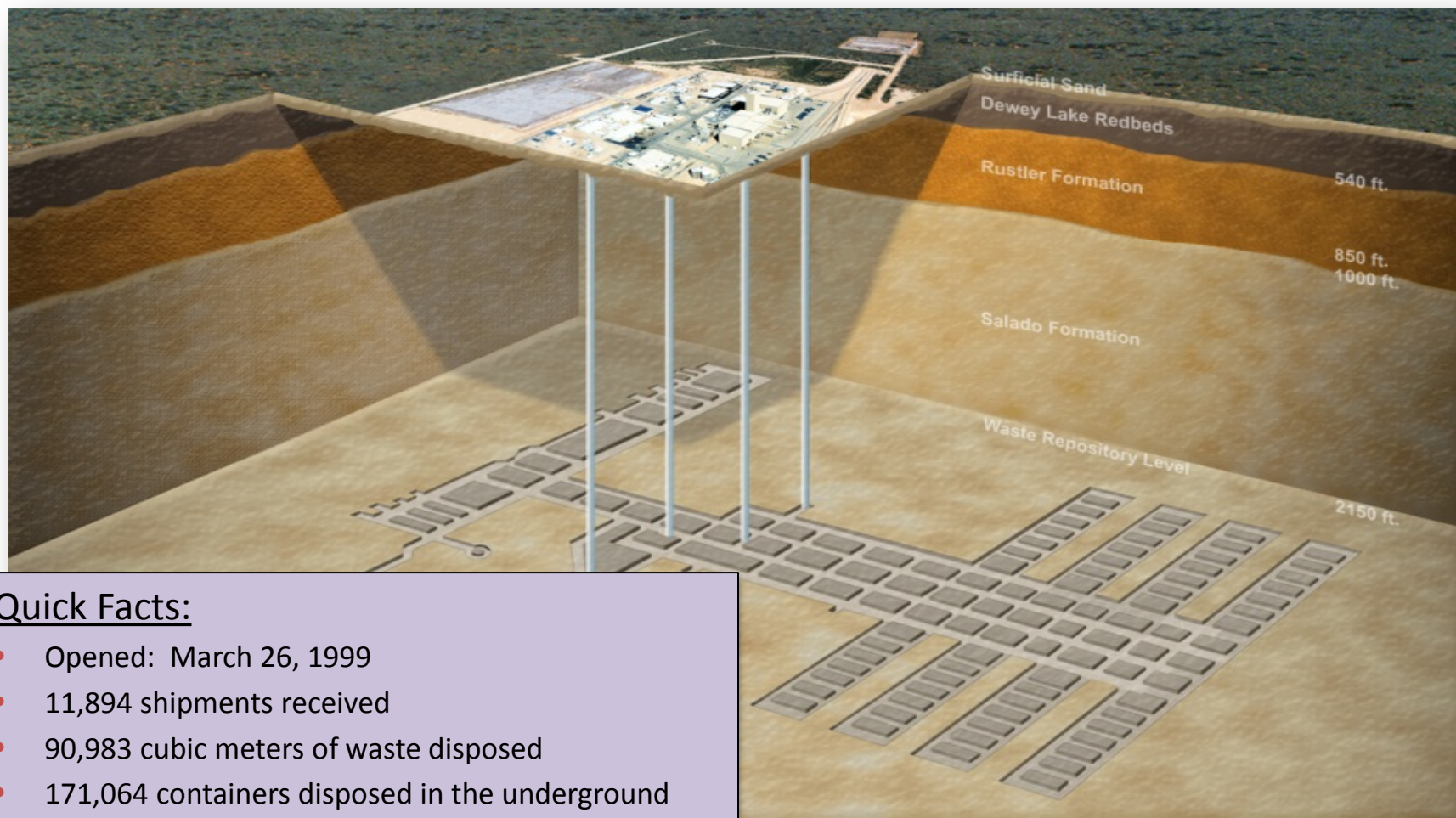


WIPP Recovery Progress

Jack Zimmerman
Idaho National Lab

Idaho National Lab Citizens Advisory Board
April 8, 2015

Waste Isolation Pilot Plant



Quick Facts:

- Opened: March 26, 1999
- 11,894 shipments received
- 90,983 cubic meters of waste disposed
- 171,064 containers disposed in the underground

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 switched to high-efficiency particulate air (HEPA) filtration mode when airborne radiation was detected and remains in filtration mode at this time.
- Extensive sampling and monitoring conducted by DOE, 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.

Recap of the Incidents at WIPP

February 5 Underground Fire



Accident Investigation Board Report

- Completed

February 14 Radiological Release

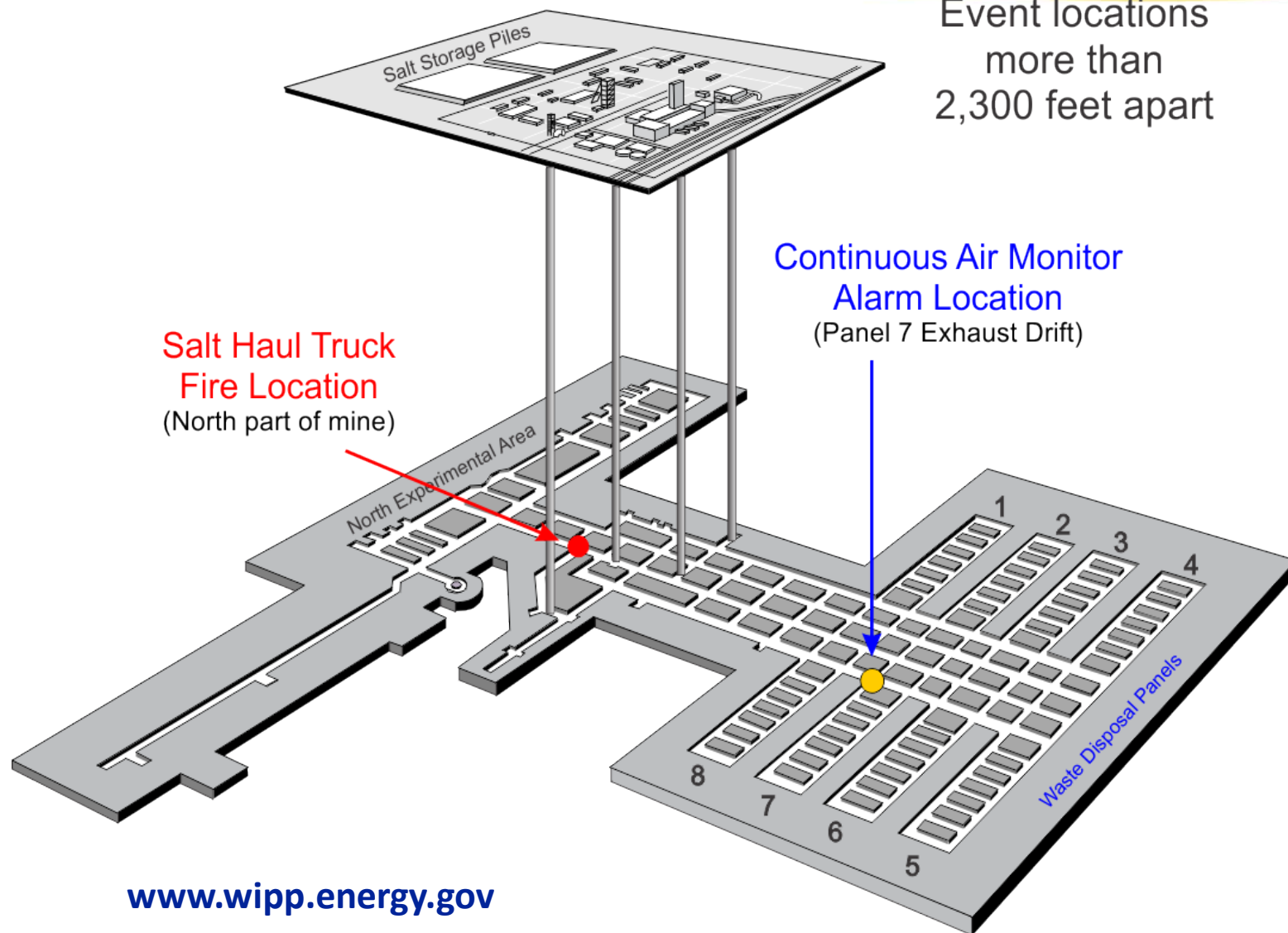


Accident Investigation Board Report

- Phase I completed
- Phase II – expected soon

Recap of the Incidents at WIPP

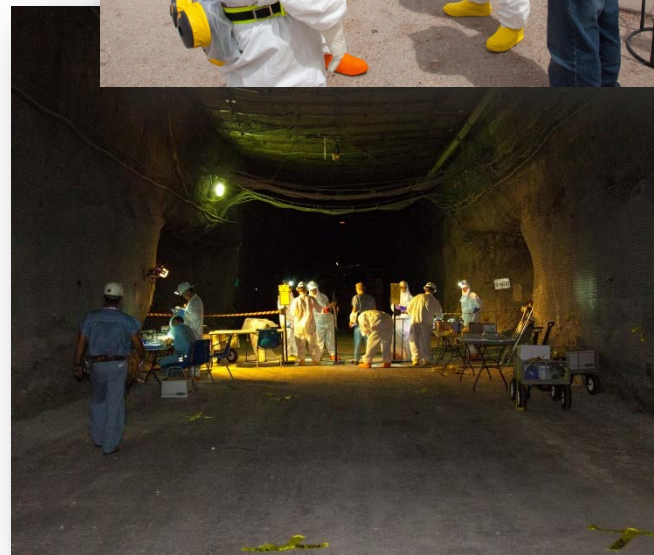
Event locations
more than
2,300 feet apart



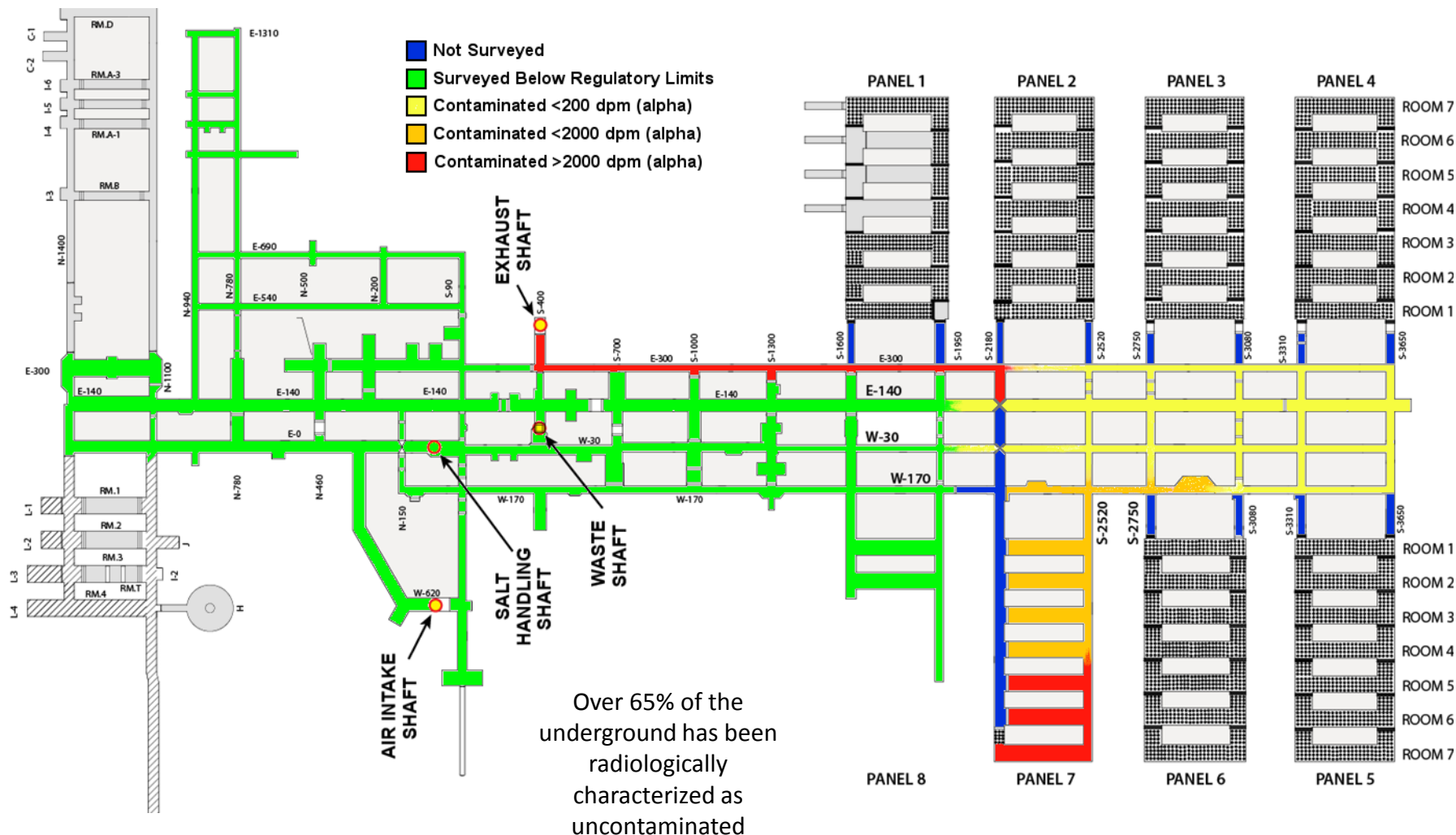
www.wipp.energy.gov

Resumption of Operations

- **Nuclear Safety Document Revisions**
- **Safety Management Program Revitalization**
- **Underground restoration**
 - Radiological Roll-back – 65%
 - Re-Establish Safety Systems – in progress
 - Soot cleaning of electrical panels- 60%
 - Cleanup, Habitability – 70%
 - Fire Protection – in progress
 - Maintenance and Ground Control – 68%
- **Expedite mine stability (resume bolting)**
- **Expedited Panel 6 and Room 7, Panel 7 Closure**
- **Interim Ventilation (procurement underway)**
- **Supplemental Ventilation Modifications (initiated)**
- **Readiness Activities**
- **Interim Operations**
 - On-site waste
 - Off-site waste generators



Radiological Rollback



Bolting Operations



- Bolting in both contaminated and uncontaminated areas
- More than 1,500 bolts installed since bolting resumed 11/14
- Catch-up bolting complete in 68% of the underground
- Bolting in contaminated areas to support Panel 6 initial closure



Contamination Mitigation

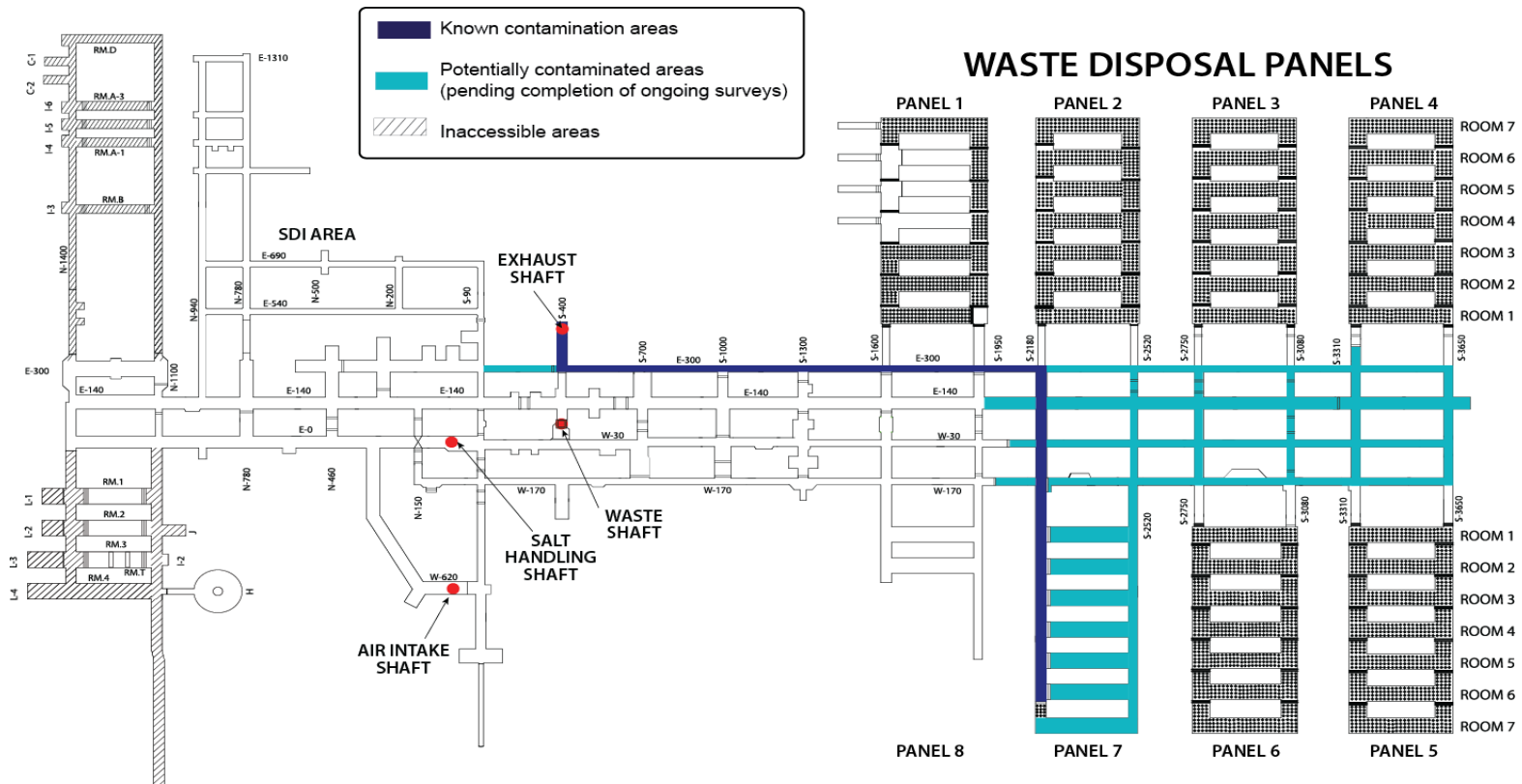


- Equipment decontamination for bolting and initial closure activities completed
- Contamination mitigation work in the WIPP underground began February 5, 2015



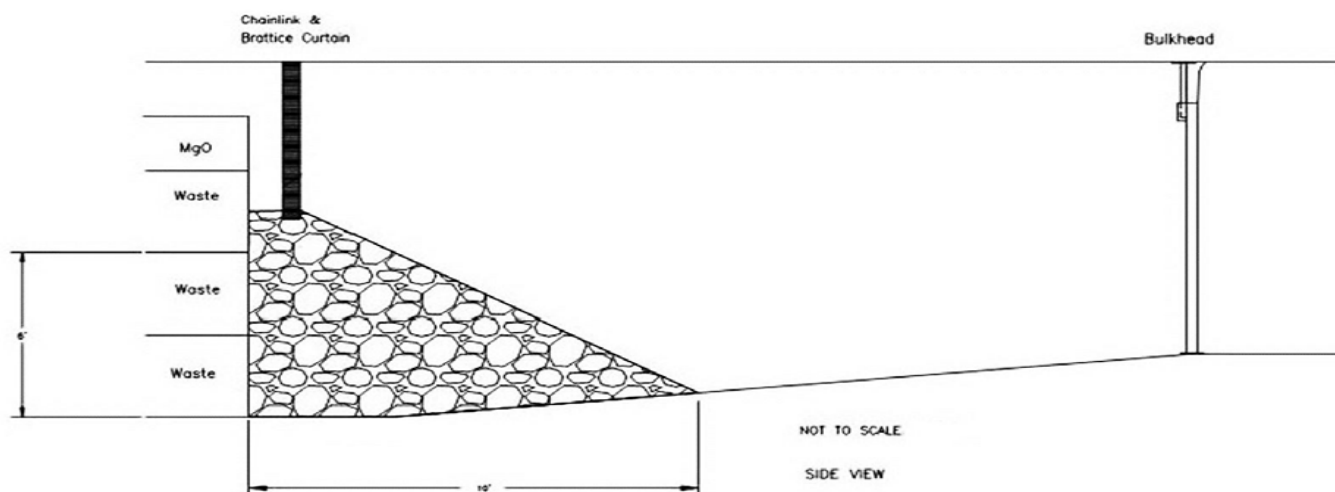
Contamination Mitigation

- Contamination fixed or sealed to the mine surface
- Water spray
- Spray-on fixative application
- Brattice cloth barrier and layer of mined salt



Panel Closure Plans

- Closure of Panel 6 and Panel 7
Room 7 remains a high priority
- NMED approved the initial closure plan for Panel 6
 - Includes chain-link, brattice cloth, run-of-mine salt and bulkheads



Project Reach

- Video/photo mapping completed in January 2015
- Visual evidence supports a single drum (LANL68660) as the source of the radiological release event
- AIB has released Panel 7



Underground Ventilation

Interim Ventilation

- Fabrication of HEPA skids and fans underway
- Will add additional 54,000 cfm of filtered airflow

Supplemental Ventilation

- Fan procurement initiated
- Clean air split – exhaust thru salt shaft
- Additional bulkheads required

Permanent Ventilation

- Following DOE 413.3B critical decision (CD) process – CD-0 completed
- Alternatives Analysis complete
- Conceptual Design Review in process



WIPP Recovery Priorities

(Re-establishing Safety)

- Establishing safety infrastructure, culture and environment
- Ensuring safety and health of the workforce and the public
- Protecting the environment and complying with applicable regulations
- Executing the Recovery Plan
- Maintaining a trained and qualified workforce
- Restoring confidence and communications with the public and stakeholders

1. Waste generated during recovery activities
2. Waste currently stored in the WIPP CH bay (received from DOE sites but not emplaced prior to the events)
3. TBD - site-specific factors

1. Prioritize shipping
2. Ship at rate WIPP can handle
3. Adjust as necessary

