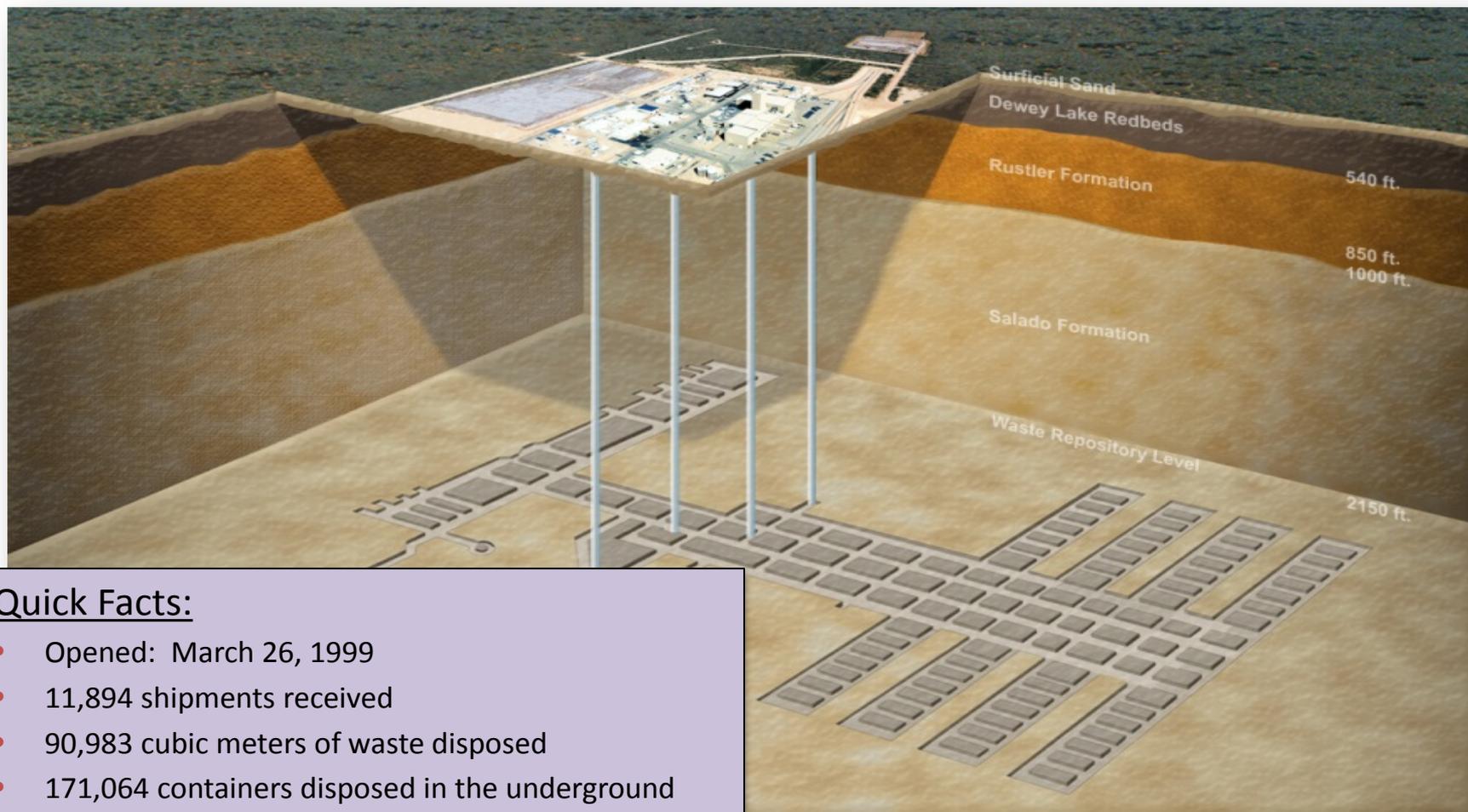


WIPP Recovery Progress

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

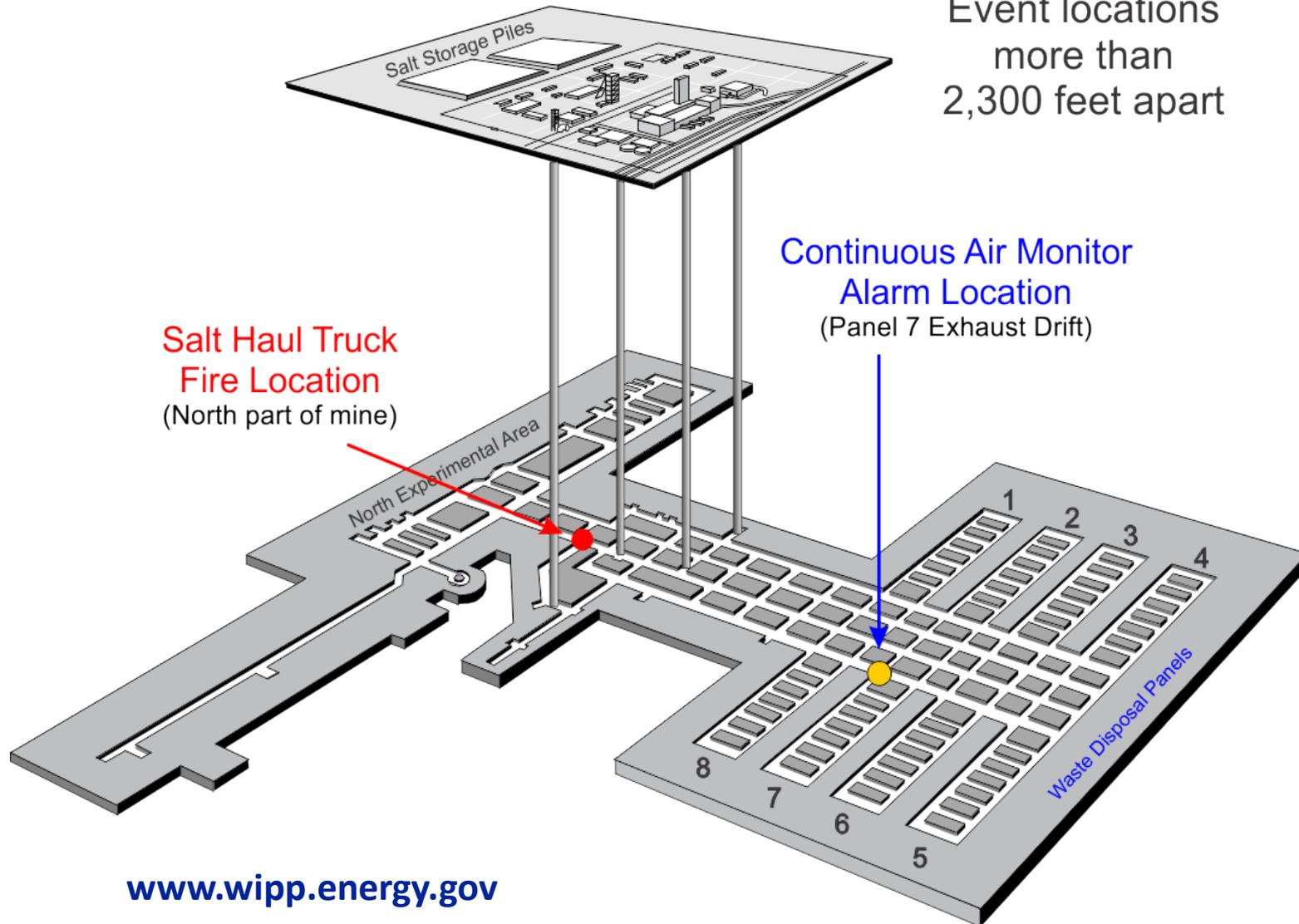


Accident Investigation Board Report

- Phase I completed
- Phase II – expected soon

Recap of the Incidents at WIPP

Event locations
more than
2,300 feet apart



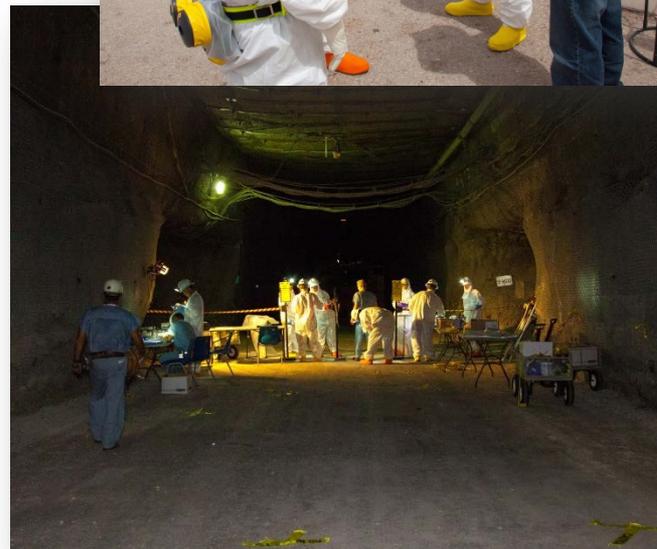
Salt Haul Truck
Fire Location
(North part of mine)

Continuous Air Monitor
Alarm Location
(Panel 7 Exhaust Drift)

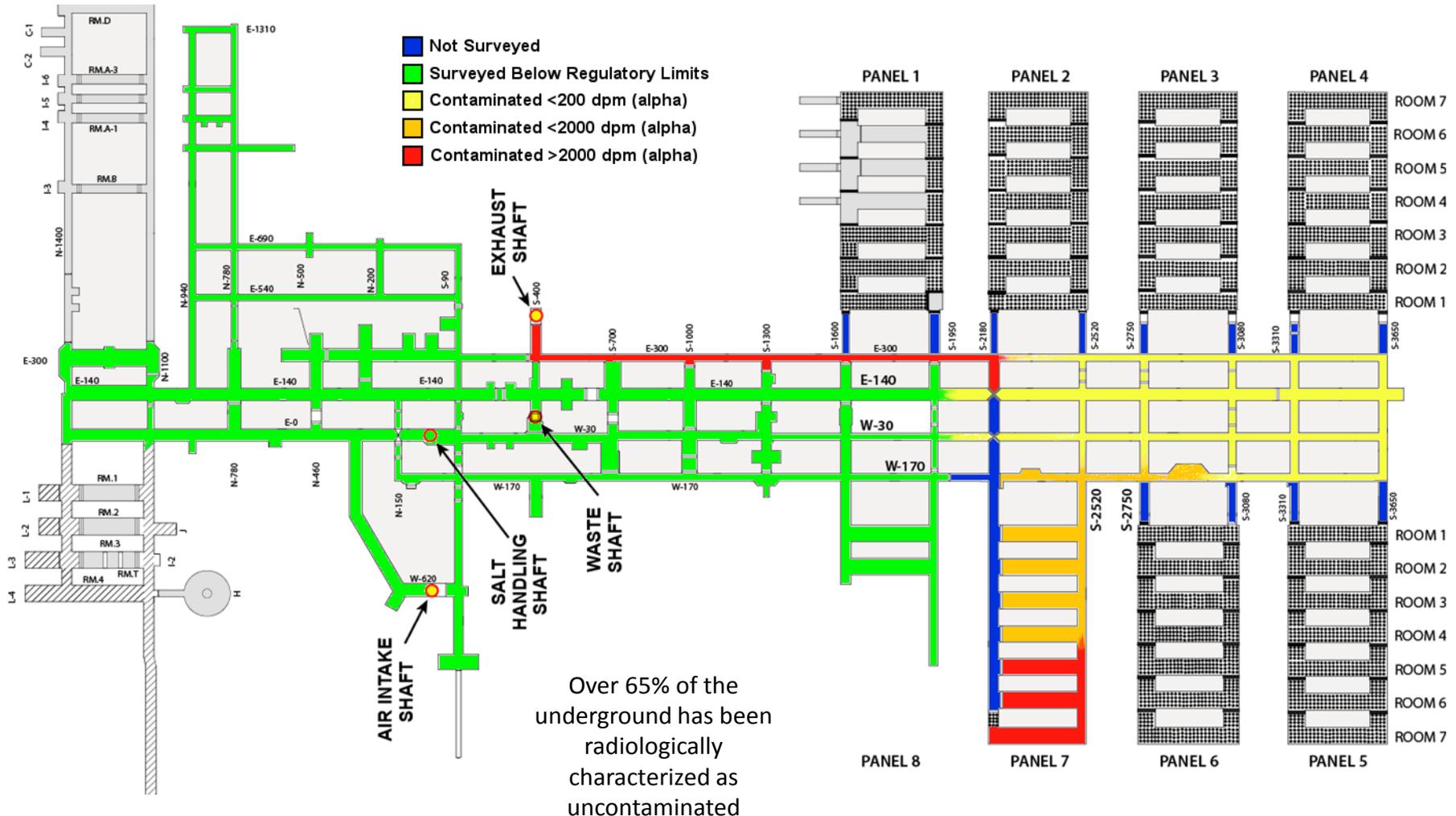
www.wipp.energy.gov

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

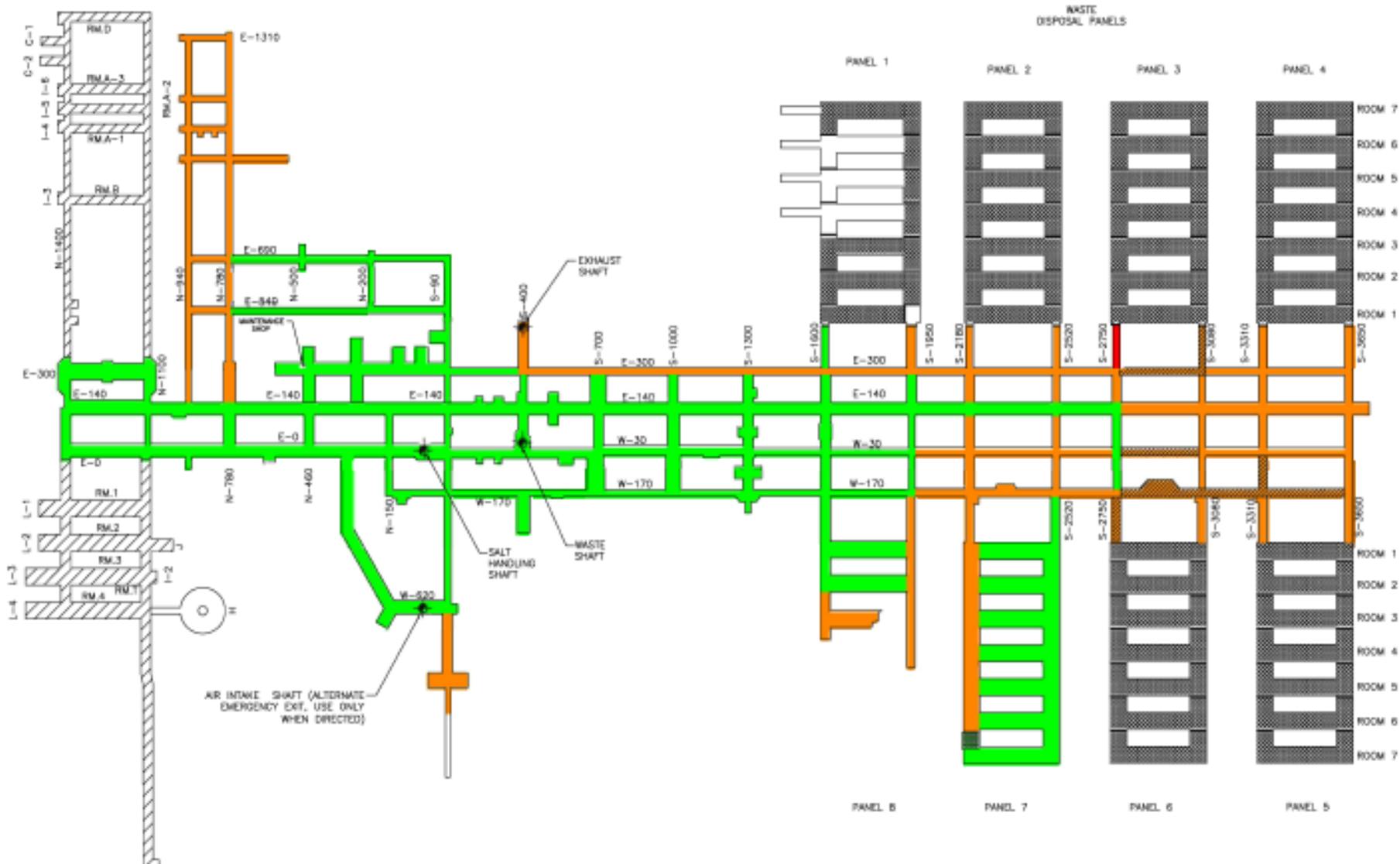


Bolting Operations



- 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

Ground Control (Bolting)



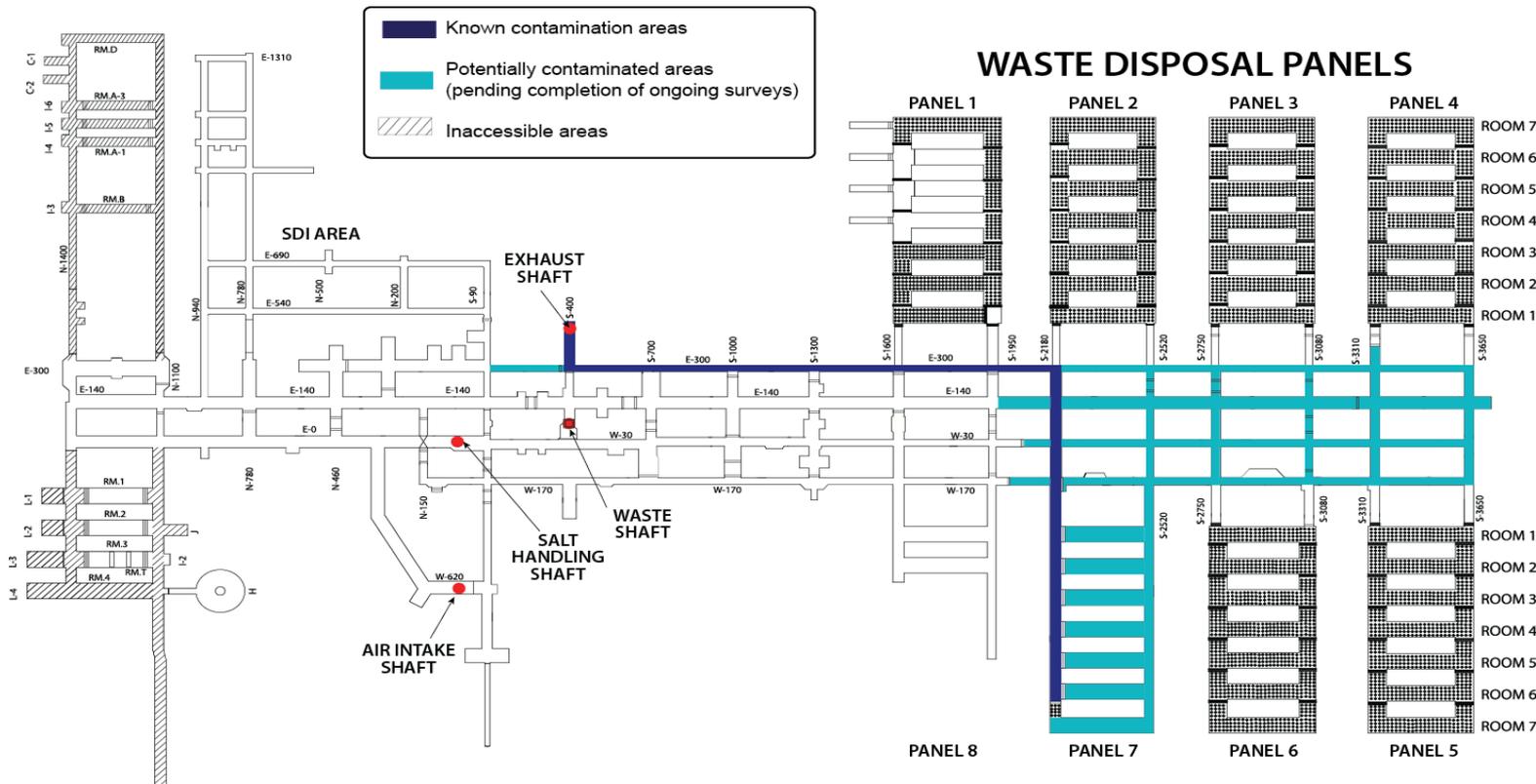
Contamination Mitigation



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



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

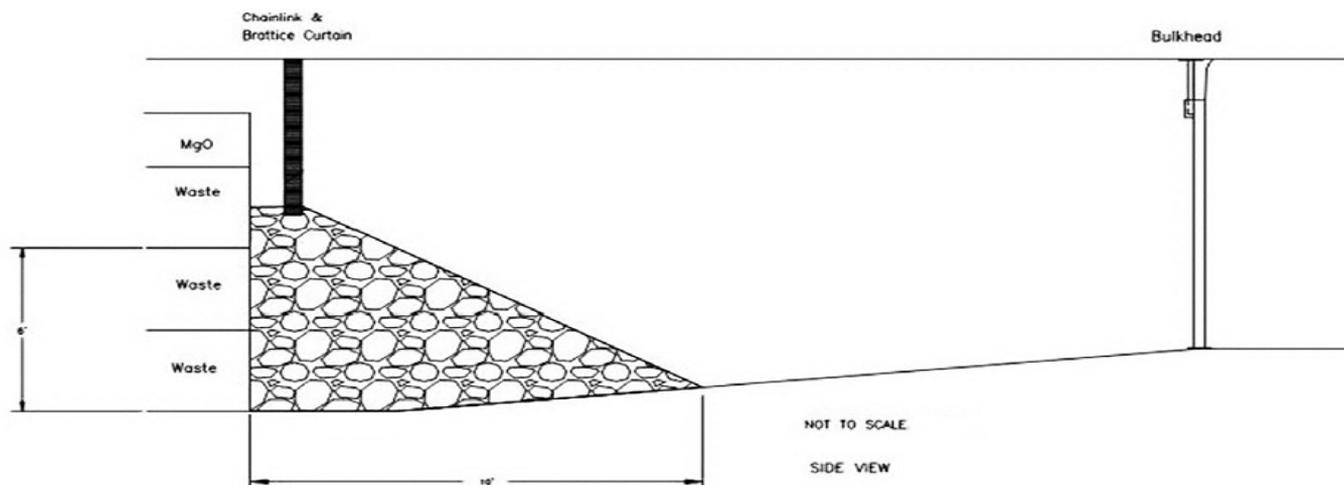


Panel Closure Plans

- 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



Steel Bulkhead



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



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

Priority for contact-handled (CH) TRU once emplacement operations resume:

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

Normal Operations

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

