

National Cleanup Workshop

Revitalizing WIPP's Infrastructure

September 12, 2019

Kirk Lachman
Acting Manager, Carlsbad Field Office



U.S. DEPARTMENT OF
ENERGY

How Did We Get Here?

- WIPP construction completed in 1980s
- Designed as a pilot project with a 35 year operational life; decommissioning originally scheduled to begin in 2014-15
- During American Recovery and Reinvestment Act, shipments were dramatically increased to an average of 20+/week
- Updated TRU waste inventory shows need to keep WIPP viable to at least 2050

Groundbreaking



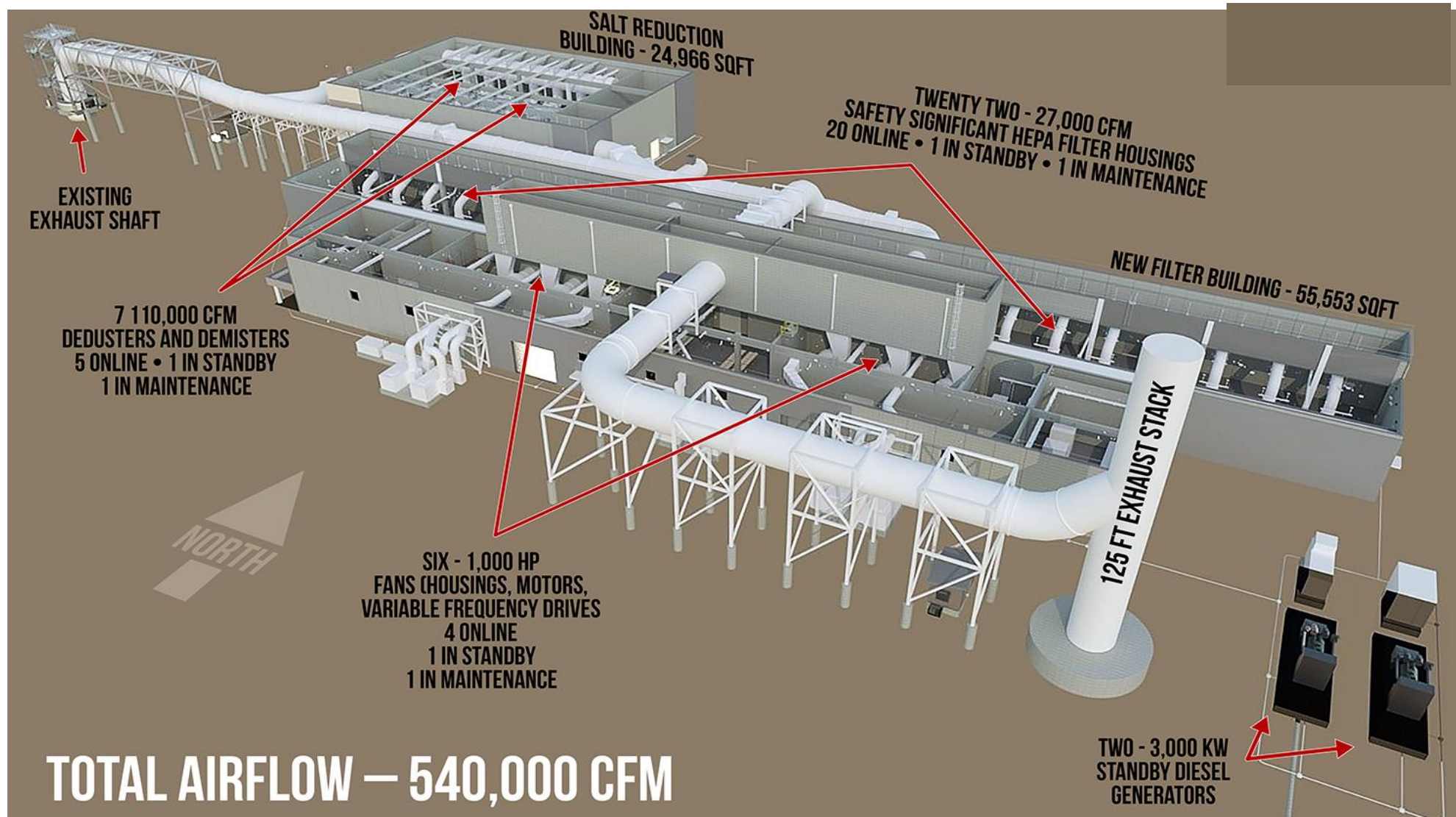
Sinking First Shaft





More than \$500 million in capital projects

- Safety Significant Confinement Ventilation System



• SSCVS Progress

- SSCVS Fabrication Assembly Building foundation slab has been poured
- Subcontractor is making preparations for steel erection
- First filter housing has successfully passed formal housing and filter banks testing
- Two diesel generators manufactured and delivered
- First de-duster components fabricated in Germany have been tested in Germany, and then sent to Grand Junction CO.
- Exhaust Fans are being fabricated in Pulaski Tennessee



Capital Projects Status

• Utility Shaft

- Installing utility duct bank from the site to the general shaft area.
- Final grading of the 22 acre section required for the Shaft and Drifts contractor has commenced and will be completed in August



• North Access Road Bypass

- The cut and fill has been completed
- All the cattle crossings have been installed
- The City of Carlsbad has installed the water line valves and thrust blocks



General Plant Projects

- Replacement air compressors
- Salt hoist repair
- Underground substation replacement
- Substations 1 & 3 Replacement
- Above Ground Airline Replacement
- WIPP Site Fire Loops Phases 1-4
- Central Monitoring Room Upgrades



General Plant Projects

- Site Infrastructure Backbone Upgrade
- Lightning Array Upgrade
- Safety Significant Fire Suppression Design
- Public Address System Upgrade Design
- Hybrid Bolter Purchase



Improving Underground Infrastructure

- WIPP underground operations personnel were unable to perform ground control for almost 9 months after the 2014 events
- It took several months of catchup bolting to return to steady state ground control
- Moving toward use of battery-electric or Tier IV final (low emissions) diesel powered vehicles



Conclusion

- Reinvesting in WIPP's infrastructure allows DOE to complete TRU waste cleanup
- We are continuing to move forward in order to complete our important mission
- We are also looking for ways to modernize WIPP



Questions?

