U.S. DEPARTMENT OF ENERGY | OFFICE OF ENVIRONMENTAL MANAGEMENT

WIPP Town Hall Meeting

Sponsored by the U.S. Department of Energy
and the
City of Carlsbad, NM

March 16, 2017

Agenda

- Opening Comments – Mayor Dale Janway
- Meeting Moderator – John Heaton
- CBFO Manager's Update – Todd Shrader
- Preparation for Shipments – Andy Walker
- Plant Status and 2017 Look Ahead – Tammy Reynolds
- Questions and Answers – John Heaton
  - In house
  - Internet

CBFO Manager's Update

Todd Shrader

WIPP Update

- New DOE Secretary confirmed
- Eligibility for shipping
- Projected shipping estimates by site
- Timing and origin of shipments
- Factors affecting shipping priorities
- Mining and waste emplacement model

Eligibility for Shipping

In order to be eligible to ship waste for emplacement at WIPP, sites must verify that TRU waste meets the requirements for safe transportation and disposal:

- All waste must meet requirements in the new WIPP Documented Safety Analysis, including chemical compatibility evaluations
- Sites must demonstrate implementation of the Basis of Knowledge for Oxidizing Chemicals for waste streams with oxidizing chemicals or sorbents – CBFO plan under development
- TRU generator sites are updating (and must get approval for) their TRU characterization, packaging and certification programs
- All previously certified waste must also be reviewed to verify that it meets the new Waste Acceptance Criteria
- Sites are demonstrating readiness to load TRU waste for transport

Projected Shipping Estimates

Key considerations in the development of the shipping estimate and points of origin included:

- WIPP waste emplacement rate
- Available waste to ship
- Regulatory commitments and agreements
- WIPP transportation/waste acceptance capabilities
- Flexibility for changing technical and policy constraints

Site	Projected Shipments thru January 2018
Idaho	61
Los Alamos	24
Oak Ridge	24
Savannah River	8
Waste Control Specialists	11
TOTAL	128

Timing and Origin

Shipments will resume soon

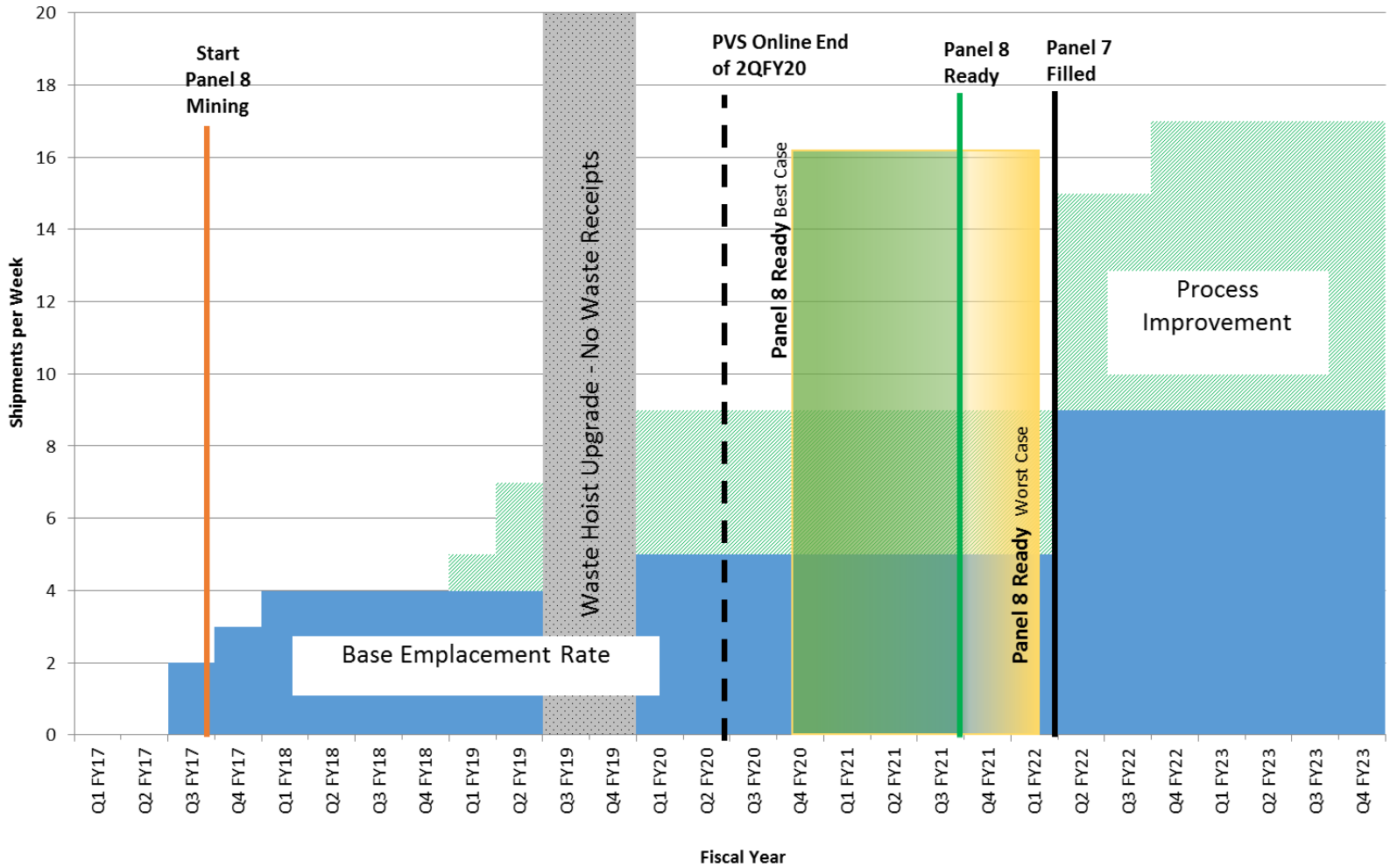
- Shipments expected to resume in April at a rate of 2/week – ramping up to 4/week by the end of 2017
- WIPP anticipates receipt of approximately 128 shipments between April of 2017 and the end of January 2018
- The first group of shipments is expected to be received from Waste Control Specialists, Idaho and Savannah River – not necessarily in that order

Other Factors Affecting Shipping Priorities

Examples of other factors that impact shipping priorities include:

- Need to mix waste streams from around the complex to avoid concentration of volatile organic compound-generating waste in one location
- Need to mix waste types to manage curie limits for the Waste Handling Building during processing
- Need to receive packages that can be stacked in a manner that maximizes use of limited disposal area

Waste Emplacement Rates FY17 - FY23



Transportation Logistics and Management

Andy Walker

CBFO Transportation Logistics Manager

WIPP Transportation

- Transportation Contracts
- Mobile Loading Unit
- WIPP Routes
- Commercial Vehicle Safety Alliance (CVSA) Level VI Inspection Program
- Working with Affected States and Tribes Along Corridors
- Notification of State/Tribal Regulators

New Transportation Contract

- Cast Specialty Transportation and Visionary Solutions LLC have operated with reduced service since 2014 but have sufficient equipment and driver teams in place to resume shipments
- Transition to new single carrier contract is expected to begin in May and will be complete before the existing contracts expire at the end of July

Mobile Loading of TRUPACTs

- CBFO has the equivalent of 3 mobile loading teams that operate across the complex
- Teams have been performing continued proficiency evolutions since 2014 and either already have, or will have, a management self-assessment or independent readiness assessment before loading actual TRU waste at each generator site

WIPP Routes – National/Local

CVSA Level VI Inspections

- Per CBFO agreements with State Regional Groups, all TRU waste shipments to WIPP require a Commercial Vehicle Safety Alliance (CVSA) Level VI inspection at the point of origin before they are allowed to depart
- Commercial Vehicle Officers from State inspection/enforcement agencies along WIPP corridors have been conducting refresher training in preparation for the resumption of WIPP shipments

Preparing Shipping Corridors

CBFO is working with State Regional Groups and Tribal Representatives to ensure transportation corridors are prepared for the resumption of shipments. Outreach activities include –

- Pre-shipment communications, road shows and outreach for active transportation corridors
- Pre-shipment "dry runs" for each corridor to test notification, monitoring, inspections and other enroute procedures

Notification of State/Tribal Regulators

In accordance with the WIPP Program Implementation Guide, Governor's designees and State commercial vehicle enforcement and emergency management personnel in host States/Tribes and along shipping corridors are provided with a series of advance notifications necessary to ensure readiness prior to shipments through their States/Tribal areas –

- Semi-annual notification letters – shipment projections, by site, provided to Governors and Governor's designees every 6 months
- Fourteen day advance notification provided to Governors and Governor's designees prior to use of a shipping route – includes schedule for first 5 shipments
- 8–week rolling schedule provided on a weekly basis – schedules are considered security sensitive and are provided on a **need-to-know basis**

Plant Status and Sustainability

Tammy Reynolds
Deputy Project Manager
Nuclear Waste Partnership

Nuclear Waste Partnership LLC
An AECOM-led partnership with BWXT and AREVA

Plant Status and Sustainability

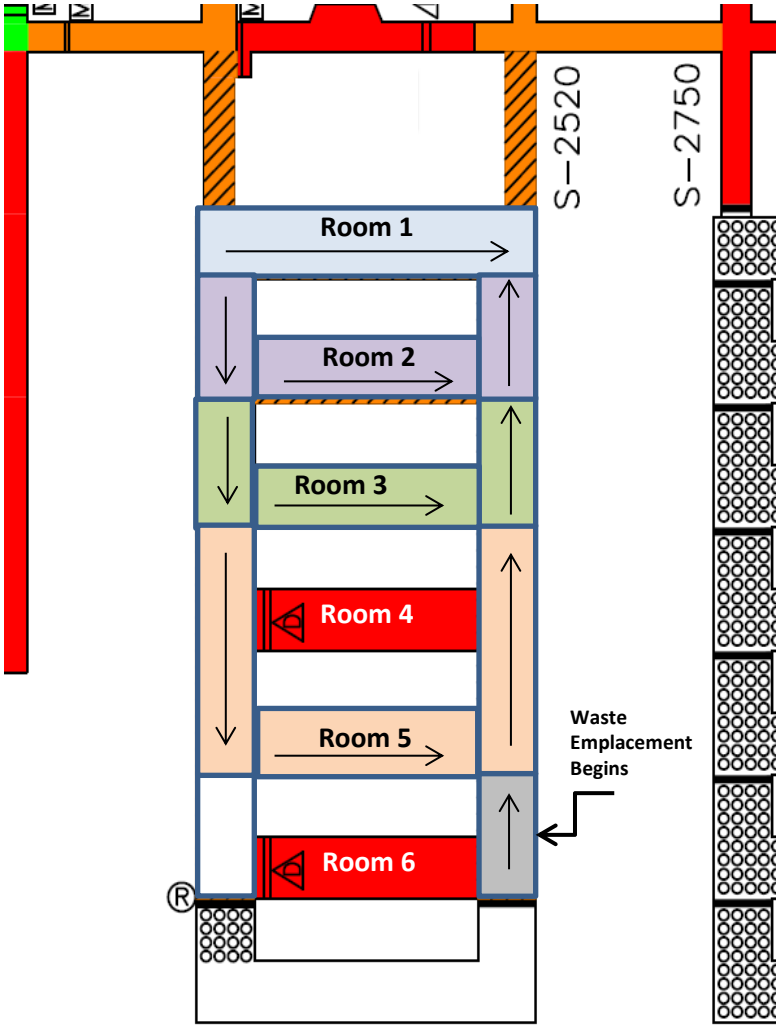
- Waste Emplacement Progress
- Panel 7 Status
- Ground Control Status
- Far South End Closure Status
- Supplemental Ventilation System
- New Ventilation Shaft
- New Filter Building
- Conceptual Depiction of Footprint
- Keys to Sustainment

Waste Emplacement Progress

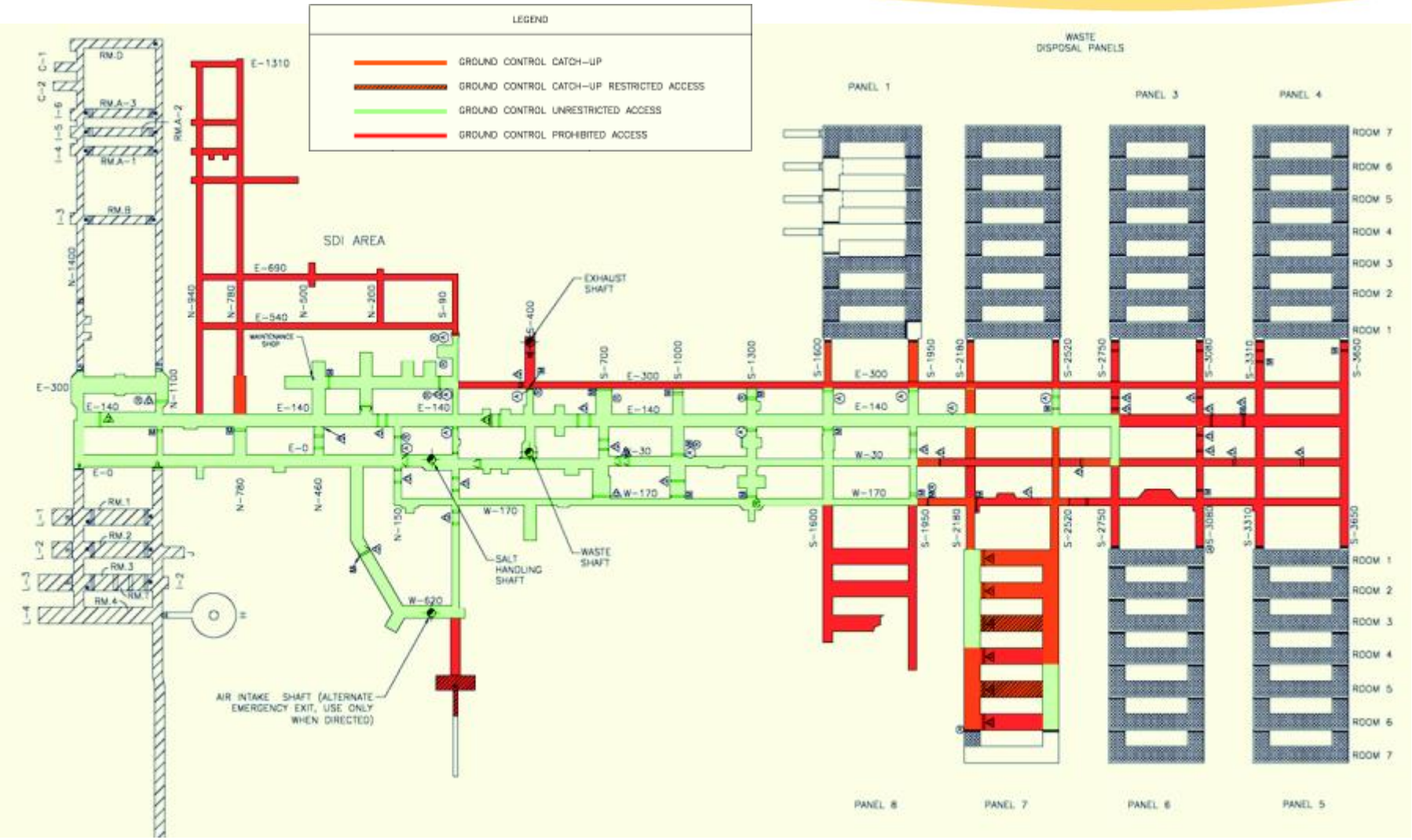
- **All available waste in Waste Handling Building has been disposed**
  - Almost 200 waste containers have been disposed since waste operations resumed January 4
  - Remaining waste containers will be emplaced once the Basis of Knowledge document has been approved and a review of the remaining drums is completed
  - Started with a single pallet per shift (Tuesday & Thursdays); worked up to two pallets per shift
  - Improvements continue to be identified through post-job reviews

Panel 7 Status

- Location of the February 2014 radiological event (Room 7) – remains closed
- Rock fall in Room 4 on Nov. 3, 2016 – room was already prohibited
- Room 6 is also prohibited, but no rock fall is currently anticipated
- Exceptional progress in bolting to make Rooms 1, 2, 3 and 5 safe and usable for waste emplacement
- Waste emplacement has started in S2520 moving west to east
- Currently available disposal capacity in Panel 7 should last approximately 3-4 years, depending on shipping rates

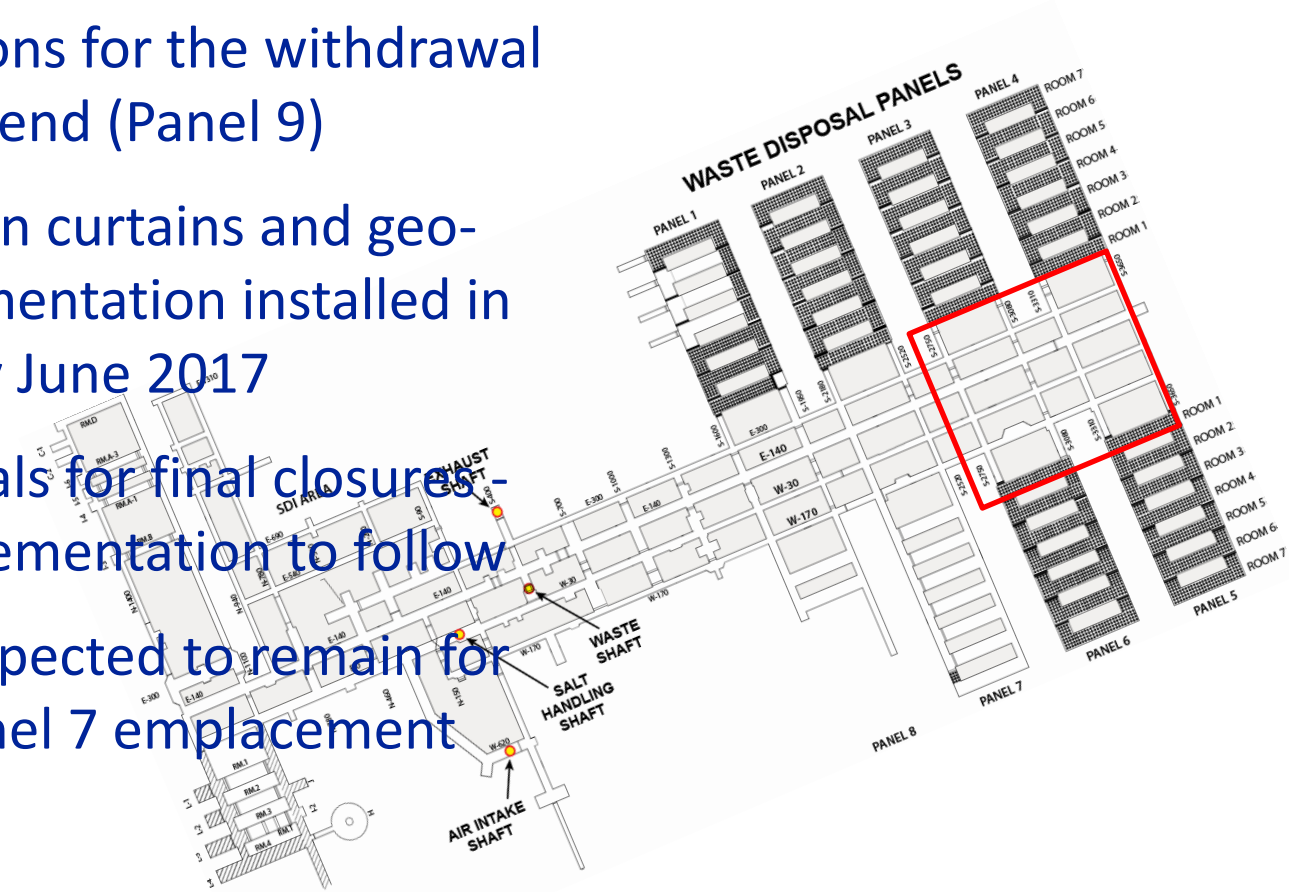


Ground Control Status



Far South End Closure Progress

- Initiated preparations for the withdrawal from the far south end (Panel 9)
- Cribbing, ventilation curtains and geo-mechanical instrumentation installed in the south mains by June 2017
- Regulatory approvals for final closures - 2+ years with implementation to follow
- Filtered exhaust expected to remain for the duration of Panel 7 emplacement



Supplemental Ventilation

- The Supplemental Ventilation System (SVS) is required to resume mining
- The SVS provides for an unfiltered ventilation circuit in the u/g that exhausts air through the Salt Shaft
- The SVS fan is interlocked off upon a loss of filtered ventilation to ensure the unfiltered area of the u/g is maintained at a higher pressure than the filtered area
- The SVS is scheduled to be online at the end of September

New Ventilation Shaft

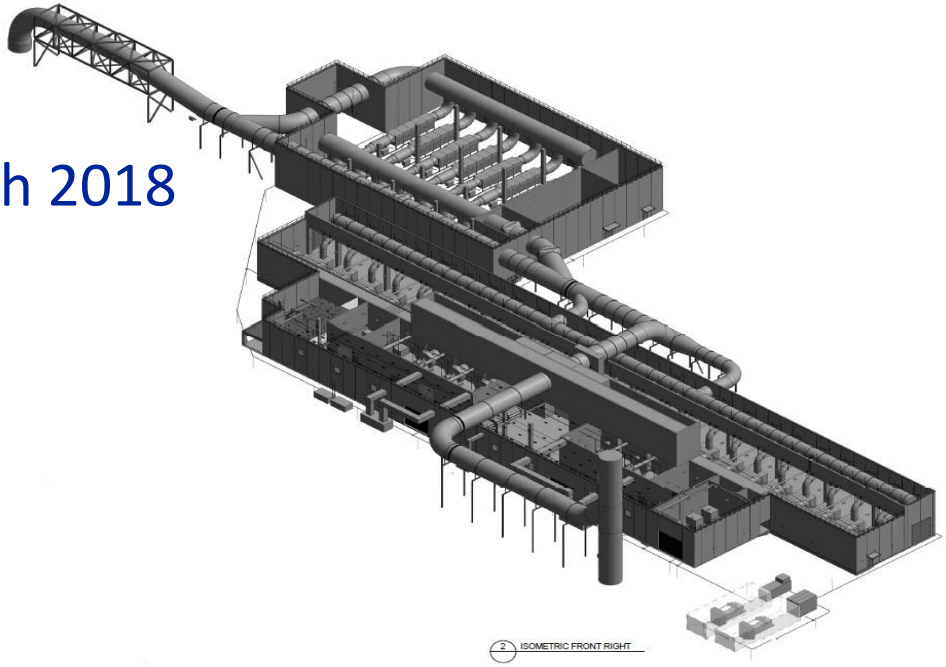
- Using top-down drilling method
- Located across the access road from the WIPP parking lot
- Geotechnical core drilling to 2,300 feet is complete
- Critical Decision 2/3 expected in March 2018
- CD 4 expected in December 2020

Permanent Ventilation System

New filter building

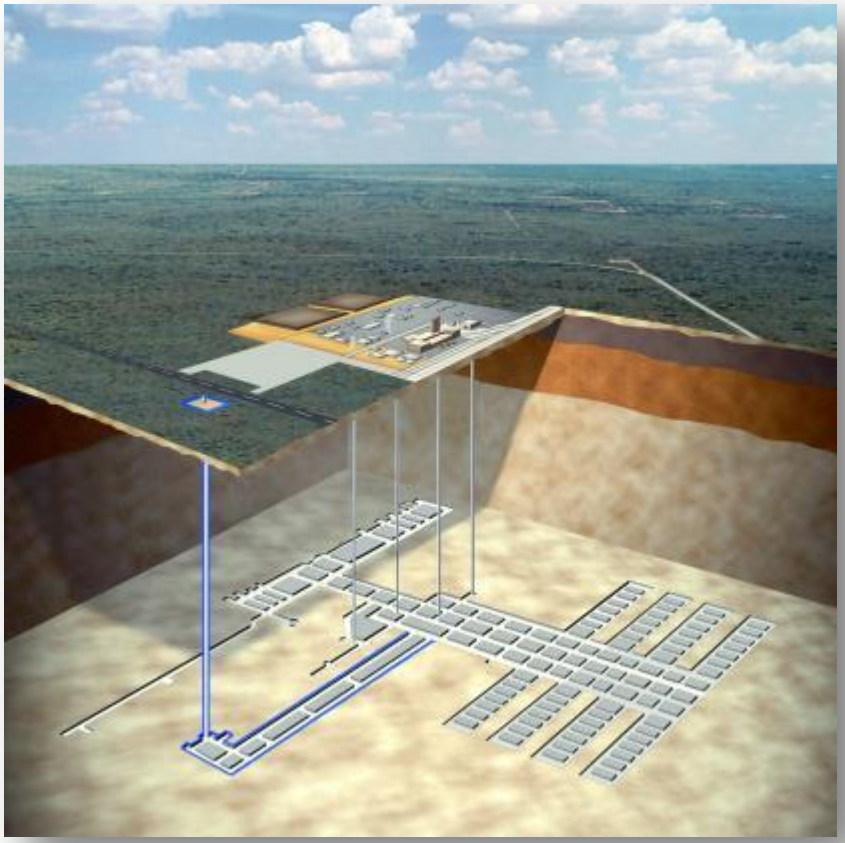
New safety significant confinement system connected to the existing exhaust shaft through a salt reduction facility and then to a new Filter Building with HEPA filters and exhaust fans -

- Currently at 90% design
- CD 2/3 is expected in March 2018
- CD 4 December 2020



Conceptual Depiction of New Footprint

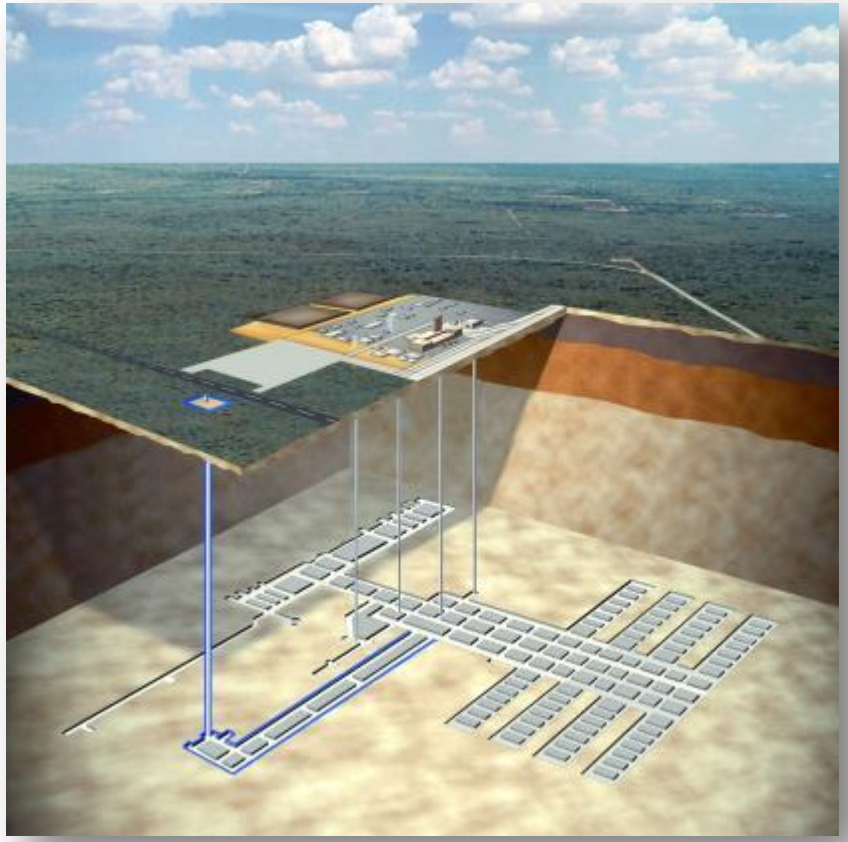
- **New footprint is being evaluated with the following criteria:**
  - ✓ Priority will be to create panels to compensate for authorized disposal area that was reduced by ground control issues
  - ✓ Panels and drifts construction is under review
  - ✓ Panels will be mined with existing equipment and methods



Conceptual Depiction of New Footprint

Actions to provide the new footprint would include considerations predicated on:

1. Approval of design
2. New Mexico Environment Department review and approval prior to construction
3. Evaluation of Land Withdrawal Act compliance
4. Priority to have the footprint ready to receive waste prior to completing emplacements in Panel 8 (expected 4QFY25)



Keys to Sustainment

- Safety Culture
- Procedure and Technical Baseline
- Succession Planning
- Contractor Assurance
- Adequate Funding and Balance

sus·tain *(sə-stān′)*
To keep in existence; maintain, continue, or prolong: sustain an effort.

Sustainment

- All of these things work together to ensure WIPP continues to improve from acceptable to great

Questions
&
Answers