Status and Perspectives from the WIPP

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Topics to Be Addressed

- Status - Readying WIPP for Operations
- Status - Preparing Waste for Shipment
- Perspectives - Future Projects
- Perspectives – Communications
- Perspectives – Pilot Plant Versus Operating Facility
Readying WIPP for Operations

- Completing physical changes for WIPP to resume operations
  - Stabilizing portions of the repository (ground control)
  - Increasing ventilation – interim ventilation system in operation
- Ensuring procedures are updated and workers are trained and prepared for waste emplacement work
- Conducting readiness assessments
Operational Readiness Reviews

- Performance-based examination of facilities, equipment, personnel and procedures
- Ensures safe operation of WIPP within approved safety envelope
- Contractor Operational Readiness Review (CORR) conducted October 3-14; final report complete
  - Independent reviewers assessed NWP readiness to commence receipt and emplacement operations
  - Pre-start findings must be resolved before re-start
- DOE Operational Readiness Review (DORR) November 14 – December 2
- As with CORR, DORR may result in pre- and post-start findings
- NMED review/authorization also required prior to waste emplacement
Ground Control

- Consists of installing roof bolts and removing unstable ground through scaling and mining
- Average weekly failure rate of approximately 40 bolts over 7+ miles of underground drifts
- Goal to install at least 110 bolts per week to maintain currently accessible areas and restore access to restricted areas

- Catch-up bolting complete in clean areas
  - Routine bolting maintenance based on geotechnical surveys
- Catch-up bolting continues in restricted areas
  - Progresses at reduced rate due to personnel protective equipment required for crews in these areas
Ground Control

Ground conditions in the south end of the mine have continued to degrade - a recent series of rock falls in prohibited areas influenced the decision to permanently withdraw from the area -
Ground Control

Benefits from closing the south end -

- Reduces potential employee exposure to ground control hazards;
- Reduces potential employee exposure to VOCs;
- Reduces the active area of the underground facility and the resources needed in these areas;
  - Decreases maintenance costs;
  - Allows workforce and resources to focus on ground control in active area;
  - Reduces footprint of the accessible contaminated area (approximately 60% reduction in contaminated area); and,
- Increases available ventilation to Panel 7 and occupied areas of the mine.

Note: The Land Withdrawal Act limits WIPP by waste volume – although additional disposal rooms will be necessary, capacity for waste disposal is not lost.
Waste Handling

• Waste emplacement is planned to take place in Panel 7, in a contaminated environment
• Requires transition from clean to contaminated zones near opening of Panel 7
• Waste handling operators working in contaminated zone will utilize personal protective clothing and powered air purifying respirators
• “Cold Operations” completed—used empty waste containers to ensure procedures are effective and workers are trained
Radiological Control Areas
Preparing Waste for Shipment

• Clean-up activities and waste certification continued during shutdown
• New WIPP Waste Acceptance Criteria (WAC) issued in July
  • TRU waste certification programs currently suspended at generator sites
  • Programs at each site must be updated to meet new requirements
  • CBFO conducting on-site technical reviews to confirm (one review conducted; three additional planned over next four months)
• All previously certified TRU waste will be evaluated to determine if additional documentation, characterization or treatment is required
  • Some waste already assessed; evaluations ongoing
  • Evaluation of previously certified waste in WIPP Waste Handling Building 92% complete
  • Significant number of previously certified containers at Idaho and SRS have been evaluated and are ready to ship
When Waste Emplacement Resumes –

- Waste in Waste Handling Building (WHB) at WIPP will be emplaced first – Expected to take 90 days
- Emplacement rate at startup will be the limiting factor – current planning based on *emplace rate of up to five shipments a week*
  - Shipping schedule for the first 6 months of operations is currently being developed
Transportation Contract Status

- Proposal evaluations are ongoing with an anticipated award announcement early 2017.
- The transition to the new single contract is anticipated to begin in May 2017 and conclude in July 2017.
- The new contact structure will be the same as the current two contracts which are fixed price contracts requiring dedicated resources.
- No disruption to transportation services is anticipated.
Future projects

- Surface storage
  - Engineered concrete overpack storage unit capable of storing 408 containers (capacity equal to 136 shipments of CH-waste).
  - Enhances operational efficiency by allowing for continued waste shipments and waste receipts during mining and maintenance outages.

- Permanent ventilation system
  - New ventilation shaft and 55,000 square foot ventilation building at surface.
  - Geotechnical analysis underway.
  - Provides airflow for underground mining and waste emplacement activities to occur concurrently.
  - Design and cost estimates expected in 2018.
Pilot Plant Versus Operating Facility

• Expect Accidents and Learn

• Salt Behaves As Expected!
  • The roof falls
  • The floor heaves
  • The walls creep
  • Open spaces close

• Design/Operations Change
  • Mine, Emplace, Close
    • Did Not Happen
Communications

• Work with State and local stakeholders to develop **message mapping** for a variety of potential WIPP events.
  • Helps distill information and clearly/accurately communicate the risk associated with various types of incidents or accidents.

• Develop Joint Information Center procedures and conduct regular exercises - include interaction with DOE headquarters in scenarios

• Use **message mapping** and practice messaging as part of drills/exercises; get feedback from evaluators and other participants
  • Develop social media outlets
  • Ensure that both primary and backup communications staff are trained and that positions have sufficient staffing
Questions