Waste Isolation Pilot Plant Recovery Update

SRS Citizen Advisory Board Meeting
New Ellenton, SC

January 27, 2015
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 automatically switched to high-efficiency particulate air (HEPA) filtration mode when airborne radiation was detected.
- underground and the WIPP mine remains in filtration mode at this time.
- Extensive sampling and monitoring conducted by DOE, New Mexico, 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.
- Town hall meetings are utilized to keep the community informed; to stay apprised go to: http://www.wipp.energy.gov
  - Live streaming of the meetings can be viewed at: http://new.livestream.com/rrv/
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 – in progress
Recap of Incidents: Layout of the Underground

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)

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Project REACH

- REACH equipment in place in Panel 7, Room 7.
- Video/photo imaging began the first week of January
  Expected completion in the next month
- AIB team members are on site guiding data collection and reviewing in real-time
Key Recovery Steps toward Resumption of Operations

• Nuclear Safety Document Revisions (continuing)
• Safety Management Program Revitalization (continuing)
• Underground restoration (underway)
  • Radiological Roll-back
  • Re-Establish Safety Systems
  • Cleanup, Habitability
  • Fire Protection
  • Maintenance and Ground Control
• Expedite mine stability (resume bolting)
• Initial Panel 6, Panel 7, Room 7 Closure
• Interim Ventilation (procurement underway)
• Supplemental Ventilation Modifications (initiated)
• Readiness Activities
• Limited Operations
  • On-site waste
  • Off-site waste generators
Mine Stability and Underground Habitability

- **Resumption of bolting** – one of the highest priorities
  - Preventative maintenance activities on equipment completed
  - Roof bolting/ground control resumed the week of November 10th

- **Waste hoist**
  - Hoist operational for transport of equipment and personnel as of mid-January 2015
Ground Control

- Bolting activities are completed in the following areas:
  - W-30 S-700 to S-1600
  - E-140 S-700 to S-1950
  - W-170 to E-300 at the S-1600 cross drift
  - Other smaller locations
- Performing a second pass through these areas to complete any additional bolting
Other Underground Activities

- Soot cleaning
  - Cleaning of underground electrical panels approximately 65% completed

- Radiological mitigation plans
  - Two applications have been tested to make contaminated areas useable:
    - Water wash
    - Paint
  - Both methods have proven effective in fixing contamination
  - Work packages are being developed to begin decontamination activities in Panel 7
Note: Survey results from the radiological buffer areas are below both the contamination values found in 10 CFR 835, Appendix D and the minimum detectible concentration for the instrumentation being used.
Closure of Panel 6 and Panel 7 Room 7 is a high priority -

- Panel 6 closure is now planned to be completed by the end of 2\textsuperscript{nd} Quarter FY15

NMED approved the initial closure plans -

- Includes chain-link, brattice cloth, run-of-mine salt and bulkheads
Ventilation

• **Current Status**
  - Ventilation in Filtration Mode
    • 60,000 cfm of filtered air
  - Note: WIPP’s standard (unfiltered) operational airflow is 425,000 cfm
    • WIPP Permit requires 260,000 cfm

• **Recovery Actions**
  - **Phase I** – HEPA skid and fan unit
    • 114,000 cfm of airflow
  - **Phase II** – Reconfiguring airlock and bulkheads and additional fans
    • 180,000 cfm airflow
  - **Phase III (not needed for limited operations in early 2016)** – Design and construct of new (permanent) ventilation system
    • Capable of providing 420,000 cfm
Recovery Status

- WIPP Recovery Plan – released September 30, 2014 - that puts safety first

- Approval of PMB – January 2015

- WIPP is making progress on recovery
  - Extensive underground radiological rollback – over 60% controlled area
  - Mine structure evaluation ongoing
  - Panel 6 and Panel 7, Room 7 closure preparations

- The current workforce is being maintained and utilized
  - Cross-training personnel
  - Changing work schedules to support time-critical recovery activities.
  - Performing readiness activities
  - Fostering a nuclear safety culture change

- WIPP continues to communicate often and transparently throughout this process with -
  - Frequent briefings for regulators and stakeholder groups
  - Regular town hall meetings
  - Weekly WIPP updates
Additional information is available

http://www.wipp.energy.gov

1-800-336-9477

or on Twitter: @WIPPNEWS