WIPP Status Update
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for
National Cleanup Workshop
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WIPP Progress

Path to Resumption of Waste Emplacement

- Documented Safety Analysis - completed
- Cold Operations - completed
- Management Self Assessment - completed
  • Operational Readiness Reviews

Schedule Challenges

- Ground Control
- Waste Handling in a Contaminated Environment

Changes to the National TRU Program

- New WIPP Waste Acceptance Criteria (WAC)
- Enhanced National TRU Program Requirements

Shipping Schedules and Near Term Limitations

- Resumption of Waste Emplacement
- Projected Shipment Numbers

Future projects for return to normal operations

- Interim Ventilation System
- Additional Surface Storage at WIPP
- Permanent Ventilation System Status
Documented Safety Analysis (DSA)

Approved April 29, 2016

- Developed under new DOE Standard 3009-2014
- Approximately 120 Safety Management Program procedures created or revised
- Implementation declared complete on May 29
Cold Operations – completed August 24 -
• WIPP crews processed and downloading empty waste containers using new DSA Rev. 5 controls
• Originally scheduled for 8 weeks, expanded to 12 weeks to complete necessary work evolutions and allow more time for crews to practice
• Included regular drills conducted to test safety management procedures
Management Self Assessment (MSA)

• Internal review conducted by the M&O Nuclear Waste Partnership (NWP) to confirm operational readiness

• Two weeks of field work - concluded August 26
  ✓Reviewed over 950 documents
  ✓Conducted 200 interviews
  ✓Conducted over 120 performance based field observations

• Identified 5 adverse findings in the areas of configuration management, fire protection, operations and management readiness

• Corrective actions responding to pre-start findings, post-start findings and deficient conditions are in progress
Contractor and DOE Operational Readiness Reviews (ORR)

- Performance-based examination of facilities, equipment, personnel and procedures
- Will ensure WIPP will be operated safely – within approved safety envelope
Return to Waste Emplacement Operations
CBFO and NWP are working hard to resume waste emplacement operations -

- Safety issues take precedent
- Ground control remains a priority
Waste emplacement in contaminated environment—
• Will take place in Panel 7 rooms 1-5
• Will require a transition from clean to contaminated zones near the opening of Panel 7
• Waste handling operators working in the contaminated zone will be in personal protective clothing and powered air purifying respirators
Radiological Control Areas
New and Enhanced Federal Oversight of Contractor Activities

- Increased oversight by Carlsbad Field Office and EM/HQ
-Clearer roles and responsibilities
New Waste Acceptance Criteria (WAC)

• WAC Revision 8 issued June 27, 2016 – Effective July 5, 2016
• Includes changes resulting from findings from the Accident Investigation Board
• Incorporates requirements from the recently approved DSA and chemical compatibility studies
• Temporary suspension of waste certification at generator sites
New Requirements

- **Enhanced Acceptable Knowledge** - detailed verification of source documentation for potentially incompatible materials and to ensure the adequate information basis.

- **Chemical Compatibility Evaluations** – identifying the range of possible chemical combinations that could occur in each waste stream using EPA approved methodology.
New Requirements

• Basis of Knowledge for Oxidizing Chemicals – waste certification programs to identify and potentially treat waste to avoid effects from oxidizing chemicals

• Generator Site Technical Reviews (GSTR) - performed by CBFO and NWP to ensure waste packaging and treatment activities meet new enhanced WIPP WAC requirements

• Re-certification Audits – required before shipping waste certified under new WAC revision 8
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 \textit{emplace rate of up to five shipments a week}
Engineered Concrete Overpacks – design used at SRS –

- Surface storage capacity for CH waste – 408 containers/136 shipments/8 weeks of capacity @ 17/week
- Storage of any single container not to exceed 1 year
- Increases the available weeks for TRU waste shipments
  - Receipt of shipments can continue during mining operations when waste emplacement operations are put on hold
- Continue CH TRU waste receipt during normal operational fluctuations and maintenance outages
- Class 3 Permit modification request (PMR) expected to be submitted to NMED in late September or early October
Above Ground Storage Project
Interim Ventilation System:

- The flange separating IVS from UVS removed August 26 and hot testing began on August 29; operational in September
- Provide an additional 54,000 cubic feet per minute of filtered airflow – doubling existing airflow in the underground
- Supports waste emplacement and allows additional equipment to operate simultaneously in the underground
• New shaft and 55,000 sq. ft. ventilation building located east of the existing exhaust shaft
• Geotechnical Analysis is underway
• Data will be used to determine bearing capacity, seismic design parameters and building foundation design
• Will provide enough airflow underground for mining and waste emplacement activities to occur concurrently
Questions