WIPP Status Update

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WIPP Progress

• **Path to Resumption of Waste Emplacement**
  - Documented Safety Analysis
  - Cold Operations
  - Management Self Assessment
  - Operational Readiness Reviews
  - Progress on Supplemental Environmental Projects

• **Schedule and Challenges**
  - Ground Control
  - Interim Ventilation System

• **Changes to the National TRU Program**
  - Enhanced Oversight
  - New WIPP Waste Acceptance Criteria (WAC)
  - Generator Site Technical Reviews

• **Path Forward**
A revised DAS (Rev. 5) was approved on April 29, 2016

- Developed under new DOE Standard 3009-2014, which significantly updated DSA requirements based on experience and lessons learned
- Approximately 120 Safety Management Program procedures created or revised
- Implementation declared complete on May 29
Cold Operations began June 1, 2016

- WIPP crews successfully processed and downloaded empty waste containers using new DSA Rev. 5 controls
- Regular drills were conducted to test safety management procedures
- Expected completion by August 31, 2016
Management Self Assessment

- Internal review conducted by the WIPP Management & Operations contractor Nuclear Waste Partnership (NWP) to confirm operational readiness
- Management Self Assessment conducted in August
- Performance is based on examinations of facilities, equipment, procedures, and personnel
Contractor and DOE Operational Readiness Reviews (ORR)

- Performance-based examination of facilities, equipment, personnel, and procedures
- Ensures WIPP can be operated within an approved safety envelope
Progress on Supplemental Environmental Projects

- WIPP north access road - phase 1 completed
- Regional mine rescue teams - additional training and equipment have been provided
  - WIPP Mine Rescue Teams showed their expertise this spring and summer, winning honors at both regional and national competitions
Return to Waste Emplacement Operations
CBFO and NWP are working hard to resume waste emplacement operations. Currently addressing some challenging non-critical path items

- Ground control remains a priority
Interim Ventilation System:

- Contractor management self assessment was performed.
- Contractor operational readiness review identified weaknesses.
- DOE concluded readiness assessment for IVS.
  - One finding and two post-start items have been identified.
This presentation focuses on enhancements to this area.
Changes to the National TRU Program

New and Enhanced Oversight of Federal and Contractor Activities

• Increased oversight by Carlsbad Field Office and EM-HQ
• Clearer roles and responsibilities have been defined
  • New National TRU Program Oversight office created at EM headquarters
  • Carlsbad Field Office reorganized to separate oversight and operations functions
New Waste Acceptance Criteria (WAC)

• WAC Revision 8 issued June 27, 2016
• Includes changes resulting from findings from the Accident Investigation Board (AIB) Phase 2 report on radiological release
• Incorporates requirements from recently approved DSA Rev. 5 and chemical compatibility studies
• Revised WAC effective July 5, 2016. On that date, site certification programs suspended; will need to be re-certified to resume operations
• All previously certified waste will also be confirmed to meet the new WAC
New Requirements – Improvement Implementation

- **Enhanced Acceptable Knowledge:** Detailed re-review of source documentation for potentially incompatible materials and to ensure an adequate information basis

- **Chemical Compatibility Evaluations:** Identifying the range of possible chemical combinations that could occur in each waste stream using EPA- approved methodology
  - Compares all chemicals and materials in waste
  - Better identifies incompatibilities

- **Basis of Knowledge for Oxidizing Chemicals:** Waste characterization programs must ensure that appropriate measures are taken to identify and treat waste to avoid potential effects from oxidizing chemicals
  - Based on actual testing
  - Specific tests conducted to better understand reactions
  - Provides recipe for resolution
Generator Site Technical Reviews (GSTR)

- Will be performed by CBFO and NWP to ensure waste packaging and treatment activities meet requirements
- Verification that generator site controls and waste information meets new enhanced WIPP WAC compliance
- GSTR must be completed to ship waste, including any previously certified waste verified to comply with new WIPP WAC
- Additional quality assurance review must be completed to approve updated programs and allow site certification activities to resume for new waste
• Striving towards resumption of waste emplacement

• Work with the DOE sites to have certified waste ready for shipment

• Continue to work on the permanent ventilation system
  o The new shaft and 55,000 sq. ft. ventilation building will be located east of the existing exhaust shaft
  o Geotechnical Analysis is underway and consists of drilling multiple boreholes to various depths
  o Data will be used to determine bearing capacity, seismic design parameters, and building foundation design
  o This system will provide enough airflow underground for mining and waste emplacement activities to occur concurrently
Questions?