Carlsbad Town Hall Meeting
Road to Recovery

U.S. Department of Energy

Waste Isolation Pilot Plant

October 2, 2014

Agenda

- Introductions / Guidelines – John Heaton (Moderator)
- Opening Comments – Mayor Dale Janway
- Recovery Plan Introduction – Frank Marcinowski
- WIPP Recovery Plan– Joe Franco
- Audience Questions
  - One question at a time please
- Closing Comments – Joe Franco

WIPP Recovery Plan

Joe Franco, CBFO Manager

Overview

- The Department of Energy is committed to reopening WIPP
- The Recovery Plan outlines the required activities and resources needed to resume waste emplacement operations in the first quarter of 2016
- DOE's highest priority is the safety, health and protection of the public, the workers, the community, and the environment.
- Recovery will proceed at a pace commensurate with workforce capabilities, mine conditions, and status of WIPP infrastructure and systems
- DOE will continue to work closely with regulatory agencies and stakeholders
- The Accident Investigation Boards and the Technical Assessment Team findings will continue to inform how DOE strengthens the procedures and programs at WIPP and at the generator sites

WIPP Recovery Plan

- Priorities for WIPP Recovery
  - Ensuring safety and health of the workforce and the public
  - Protecting the environment and complying with applicable regulations
  - Maintaining a trained and qualified workforce
  - Communicating with the public and stakeholders

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

Recovery Strategy Key Elements

- Key Elements of the Recovery Strategy
  - Safety
  - Regulatory compliance
  - Decontamination
  - Ventilation
  - Mine stability and underground habitability
  - Workforce retraining
  - Managing waste streams

Safety

- Upgrade Safety Management Programs in response to AIB reports,
  - Emergency Management
  - Fire Protection
  - Radiological Readiness and Safety
- Revise Nuclear Safety Documents

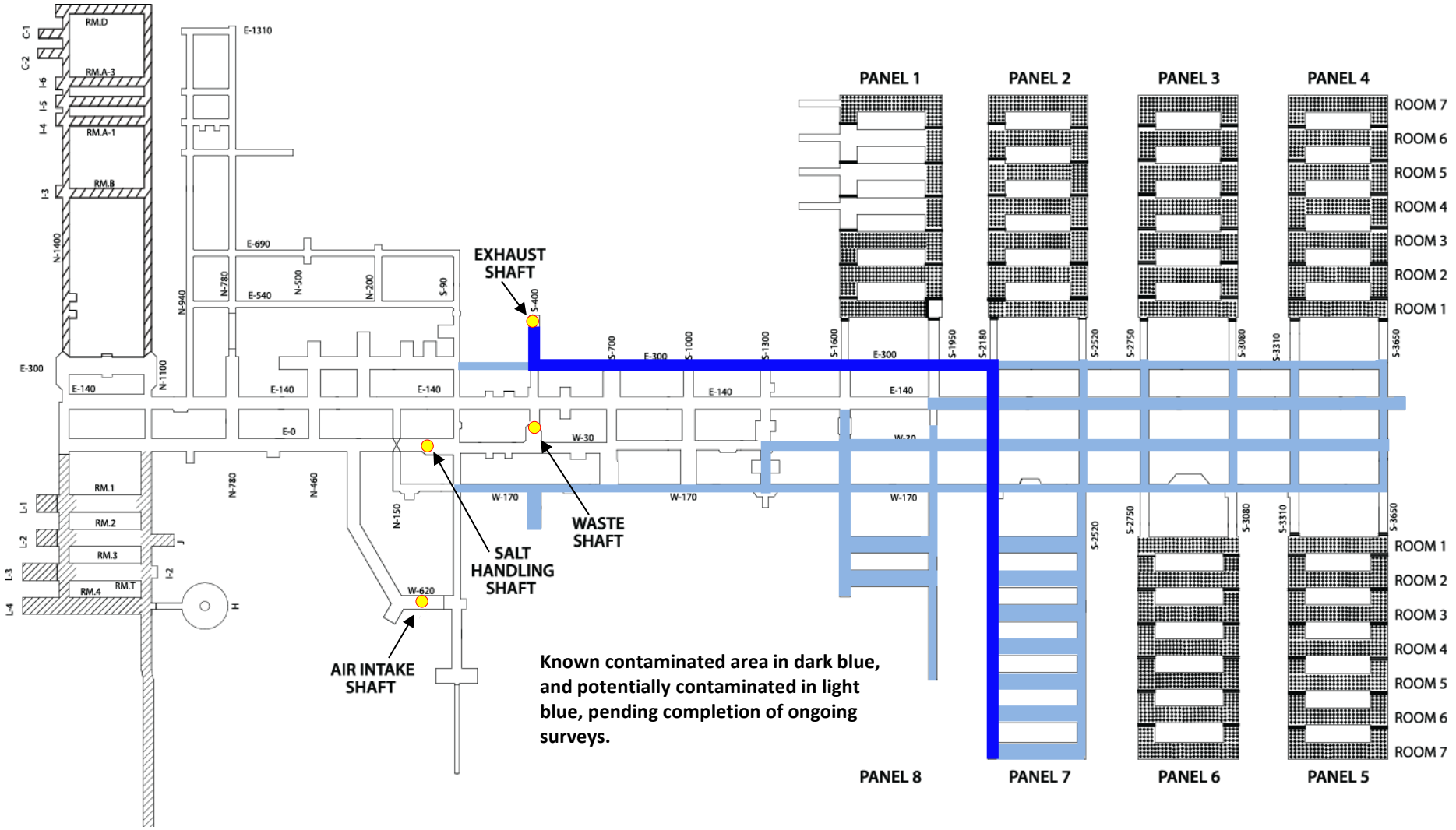
Regulatory Compliance

- The Department will work closely with WIPP's regulators to expedite resumption of operations
- Perform actions mandated by the RCRA (e.g., Hazardous Waste Permit, continued notifications to NMED, post-emergency reporting, decontamination updates, etc.)
- Submit proper notices and modification requests for activities that deviate from the current permit (e.g., permit modification request to address the change of the minimum running annual average ventilation exhaust rate of 260,000 standard cfm)

Panel Closure Activities

- Panel 6 closure a top priority
  - Zone recovery is sequenced to facilitate access to, and expedited closure of Panel 6
- How will Panel 6 be closed?
  - Construction of a substantial barrier, including bulkheads
- Closure of Room 7, Panel 7 will follow closure of Panel 6 once AIB investigation is completed

Decontamination



Known contaminated area in dark blue, and potentially contaminated in light blue, pending completion of ongoing surveys.

Decontamination (cont.)

Anticipated Approach:

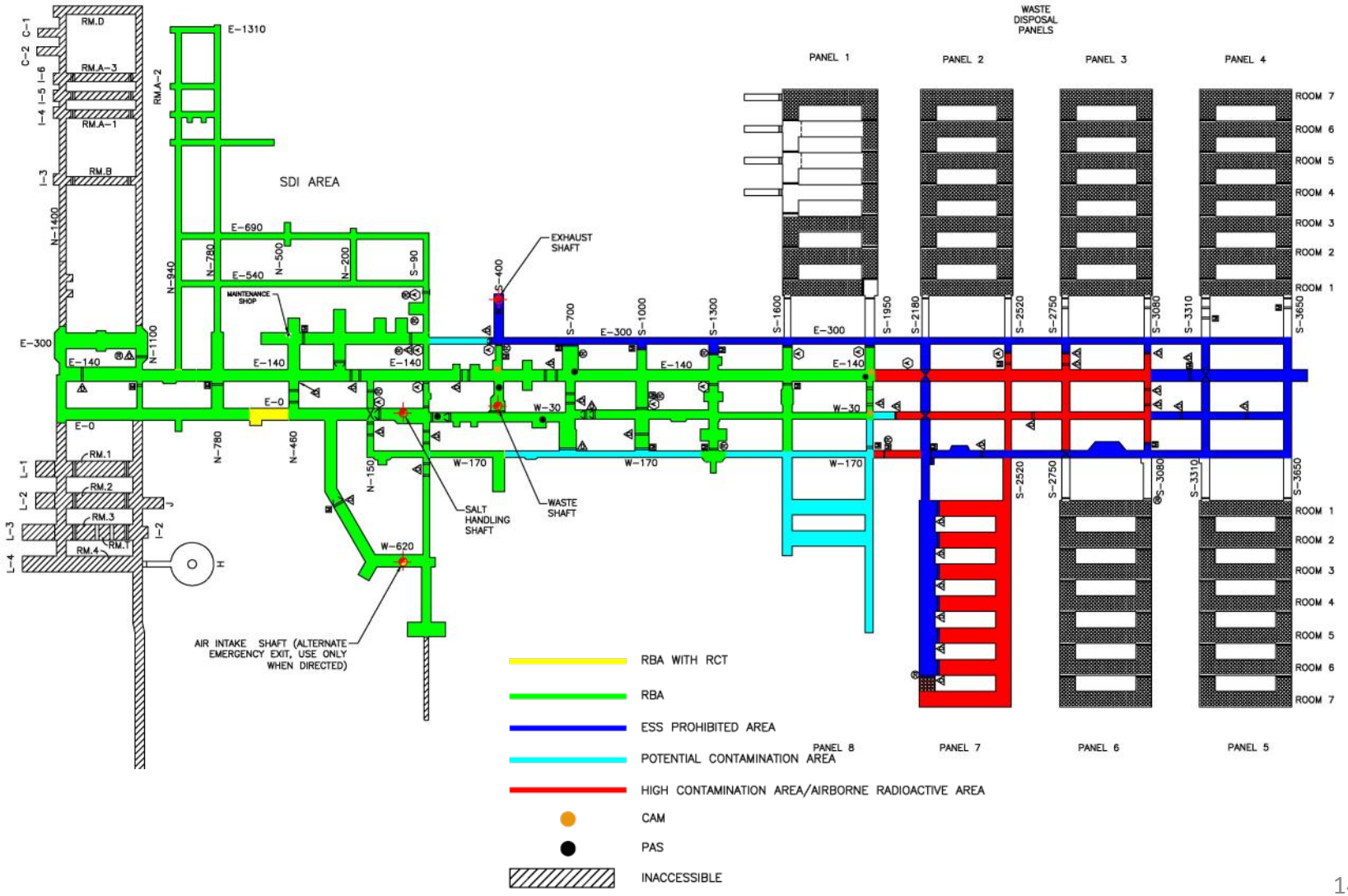
- Contamination will be fixed or sealed to the mine surface
- Anticipated use of water spray for most areas of low contamination
  - Will create a crust on salt surfaces
- Higher activity areas will utilize a spray-on fixative application
- After application, floors will be covered with a brattice cloth barrier and ~ 4 inches of mined salt.

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 units
    - 114,000 cfm of airflow
  - **Phase II –** Reconfiguring mine circuits and additional fans
    - 180,000 cfm airflow
  - **Phase III** – Design and construct a new (permanent) ventilation system
    - Capable to provide 420,000 cfm

Mine Stability and Underground Habitability



Workforce Retraining

- Current status:
  - Cross-training personnel
  - None of the aboveground waste is part of the nitrate salt stream
  - Changing work schedules to support time-critical recovery activities
- Recovery actions:
  - Continued-cross training of employees
  - Re-qualification training
  - Performing readiness activities
  - Fostering a nuclear safety culture change

Managing Waste Streams

- Waste on-site at WIPP
  - 144 waste containers (129 cubic meters) safely stored above ground at WIPP
  - None of this aboveground waste is part of the nitrate salt stream
- Waste staged at Waste Control Specialists
  - Waste from same waste stream as breached container at WIPP staged in modular concrete canisters
  - Other inventory safely stored within an enclosed facility
  - The balance of the inventory (i.e., waste containers that do not contain un-remediated nitrate salts) is safely stored within an enclosed storage facility
- Effects on Waste Generators
  - DOE continuing to characterize and certify TRU waste
  - DOE carefully evaluating and analyzing the impacts on storage requirements and commitments with state regulators at the generator sites.
  - These efforts will inform decisions related to the availability of storage for certified TRU waste until waste shipments to WIPP can resume

Schedule

Recovery Actions	WIPP Summary Schedule		
Fiscal Year	FY14	FY15	Outyears
Incident Response			
AIB Investigation			
Filter Change (every 6-9 months)			
Waste Hoist Tower			
Resume Bolting			
Panel 6 Closure			
Room 7, Panel 7 Closure			
Zone Recovery			
Equipment Procurement/Upgrade			
Safety Management Improvement			
DSA Revision			
Interim Ventilation			
Supplemental Ventilation			
Operational Readiness Review			
Resume Waste Emplacement Operations			
Regulatory Interactions, Review, Approval			

Recovery Cost

- WIPP recovery costs for resumption of operations are estimated to be approximately $242 million
  - Major cost drivers include: facility program and safety documentation enhancements and revisions, mine habitability and operations, facility upgrades, waste emplacement operations, operational readiness assessments, and program management support.

- In addition, two capital asset project line items are required:
  - a new permanent ventilation system, with an estimated cost range of $65 million–$261 million
  - supporting exhaust shaft, with an estimated cost range of $12 million–$48 million
  - These line item cost estimates are preliminary, and will be refined as detailed planning is developed and as uncertainties are reduced

- Costs are based on the planning to date and may change as new information is received or requirements change

Questions?