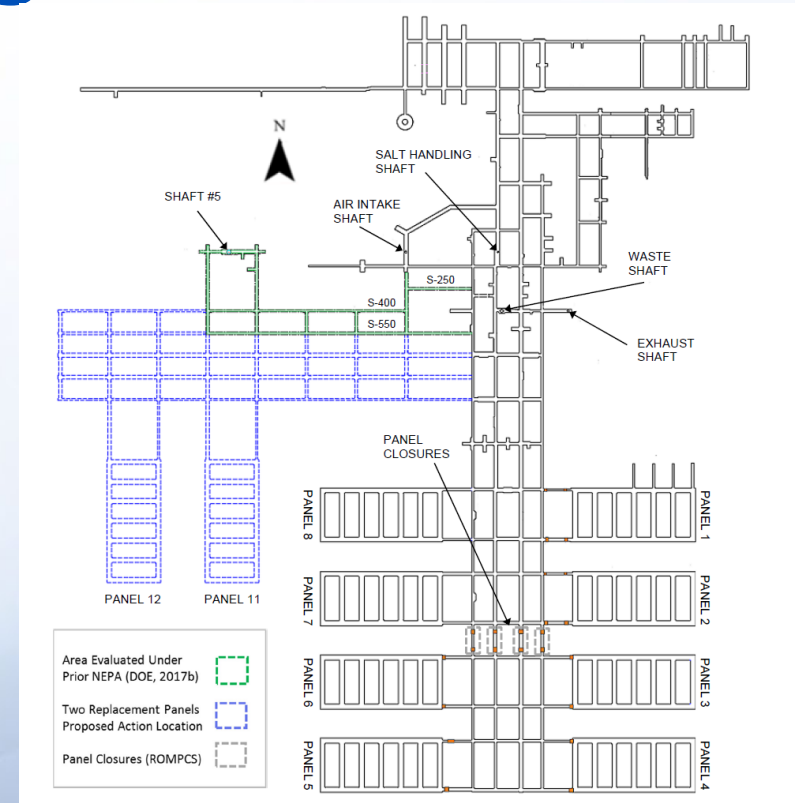


# Upcoming Planned Change Request for Additional Panels in the Waste Isolation Pilot Plant

## Informal Zoom Meeting

US Environmental Protection Agency

December 7, 2023



# Welcome & Introduction



- Background: DOE is proposing to add new panels (11 & 12) to the existing WIPP repository
  - New Mexico Environment Department (NMED) has approved the panels as part of the operating permit (10/4/23)
  - DOE must ensure that the repository will continue to meet EPA's radioactive waste disposal standards with the new panels
  - DOE will demonstrate this through a planned change request or PCR to be submitted to EPA sometime in early 2024
- Purpose: Preliminary meeting to discuss the upcoming PCR and EPA's review process
  - DOE will be presenting a very general, high-level overview of what to expect
  - Solicit early feedback from stakeholders
- Structure: Informal and smaller-scale
  - Open discussion – we want to hear your thoughts/questions at this stage!
  - Highlights can be taken back to respective interest groups to shape public discussion/comments once official PCR is submitted
- Follow-up: Future actions
  - All presentations and recording of the Zoom meeting will be available on the WIPP website (<http://www.epa.gov/radiation/wipp>)
  - Following official submission of the PCR, larger-scale in-person stakeholder meetings to be held in Carlsbad and northern New Mexico (Spring 2024)

# What is the Waste Isolation Pilot Plant?



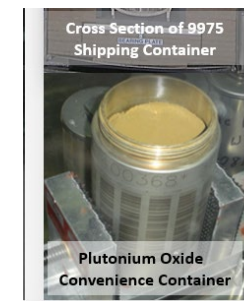
- WIPP is a deep geologic repository, first of its kind in the world – located in Permian bedded salt (~250 million years old)
  - Salt (halite) creeps and closes void spaces over geologic time isolating waste from surrounding environment
- Disposal for up to 6.2 million ft<sup>3</sup> (~176,000 m<sup>3</sup>) of defense-related, transuranic (TRU) radioactive waste
- Emplaced waste includes contaminated soil, equipment, and debris from manufacture of atomic weapons and subsequent clean-up
  - Contact-handled (CH) and remote-handled (RH) TRU Waste
    - CH TRU waste mostly Plutonium and Americium; RH TRU waste varies
  - Surplus plutonium is a new addition to waste
  - WIPP-bound waste currently stored at ~ 15 DOE sites across U.S.; some sites (e.g., Rocky Flats, small quantity sites) have completed clean-up activities



Debris waste



Super compacted drums



Surplus Pu

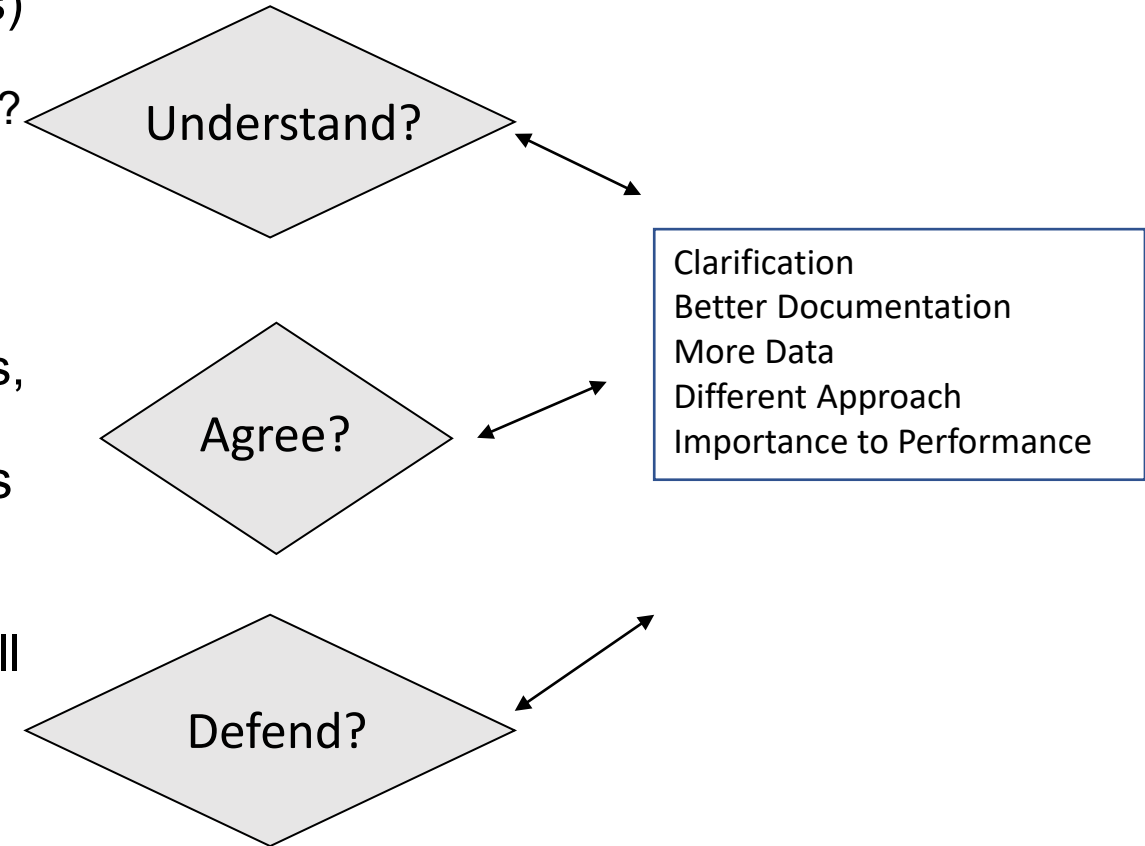
Source: DOE

- EPA's primary oversight role is to certify Department of Energy compliance with our 10,000-year radioactive waste disposal standards at 40 CFR Parts 191 and 194
  - WIPP is also subject to federal hazardous waste and radioactive waste disposal regulations, which are implemented by the New Mexico Environment Department (NMED)
- Recertification
  - Process restarts every five years, with most recent recertification May 3, 2022 (87 FR 26126)
- Continuing Compliance
  - Waste Characterization
  - Quality Assurance
  - **Review of planned/unplanned changes—the new panel PCR is part of this process**
  - Biennial Environmental Compliance Report—reviewed every 2 years, letter to DOE signed by Admin.
- Outreach
  - Supports all our activities

# EPA Review Process

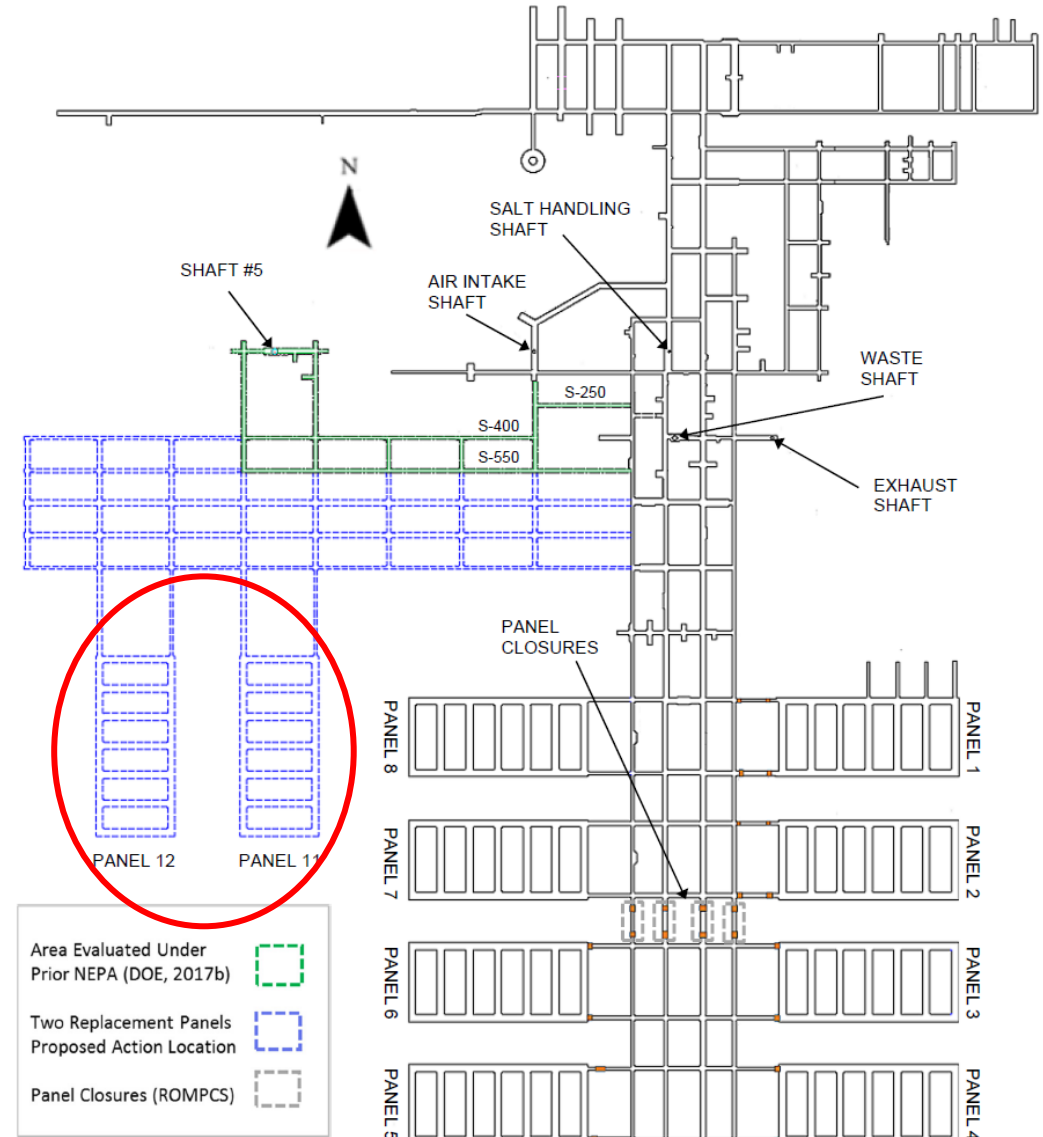


- Start with 'Completeness Review'
  - Determine what has changed (e.g., previous CRAs)
    - Design changes?
    - Waste information (e.g., characterization, inventory)?
  - Look at parameter updates – are they aligned with current scientific information?
  - Evaluate how updates are integrated into PA
    - Includes issues identified in previous recertifications
  - Possibly request additional information/calculations, as necessary
- Hold meetings to solicit comments from stakeholders and the public
- Announce final determination
  - Review of the documentation provided, including all relevant public comments
  - Draft and finalize supporting documents, including FR notice (if required)
  - Docket all information



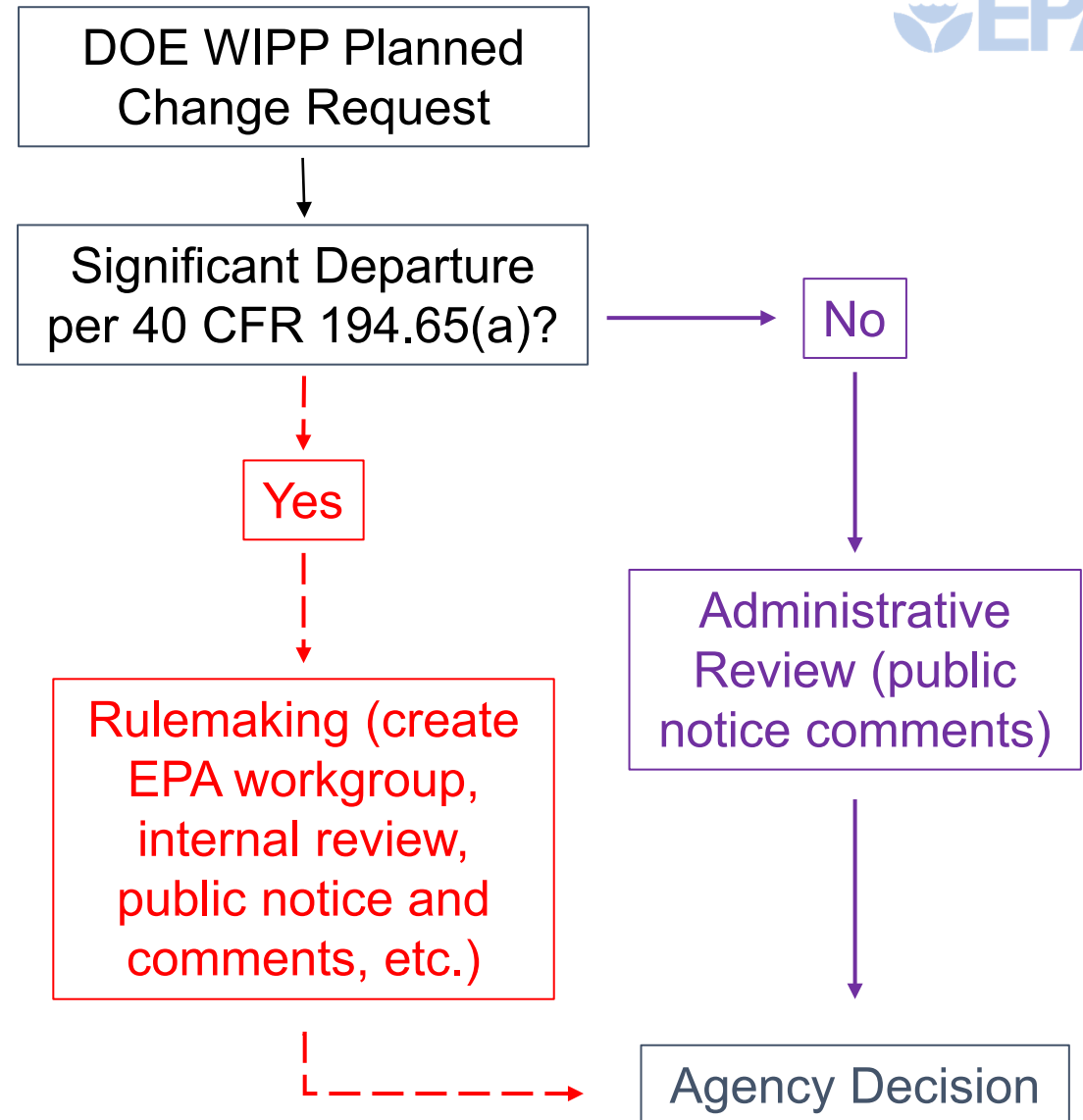
# Proposed change

- DOE will propose adding two new panels, Panels 11 and 12, to the west of the current waste area
  - Two new panels are to replace space lost from abandoning Panels 9, and losing portions of Panels 1, and 7
- DOE is expanding the repository footprint into a new area
- DOE states that there will be no waste beyond WIPP Land Withdrawal Act (LWA) limits
- EPA (10/13/21) and NMED (5/24/22) acknowledged receipt of DOE's notification to begin mining the drifts that would be used to access the new panels



# Issues

- Does the planned change request demonstrate that WIPP will comply with EPA's long-term radioactive waste disposal standards?
- Under 40 CFR 194.65(a), EPA needs to determine whether this request "depart(s) significantly from the most recent compliance application"
  - "Significant" departure would require EPA to conduct a rulemaking to modify or revoke
  - EPA will document the technical and legal basis for whatever decision the Agency makes



# What are the options?



- If EPA decides panels are a significant departure:
  - Agency will conduct a rulemaking to reopen original certification
    - Proposed and final stages
    - Federal Register notices, official public comment periods and public hearings
- If EPA decides panels are not a significant departure:
  - Agency may conduct an administrative review, as with previous changes (e.g., MgO)
    - Shorter process than a rulemaking, but still likely more complex than previous changes
    - Will post the PCR submission on the WIPP website and WIPP-NEWS listserv and open an unofficial public comment period
    - Following review of documentation and public input, EPA's final determination would be posted on the WIPP website and WIPP-NEWS listserv
- All documentation will be docketed (<http://www.regulations.gov>) and posted on the WIPP website (<http://www.epa.gov/radiation/wipp-news>)



Questions/Comments?