



Status of Waste Isolation Pilot Plant Repository Reconfiguration Planned Change Request

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Overview

- **Introduction**
- **Geotechnical Issues**
- **Proposed Design**
- **Performance Assessment**
- **Regulatory Changes**

Introduction

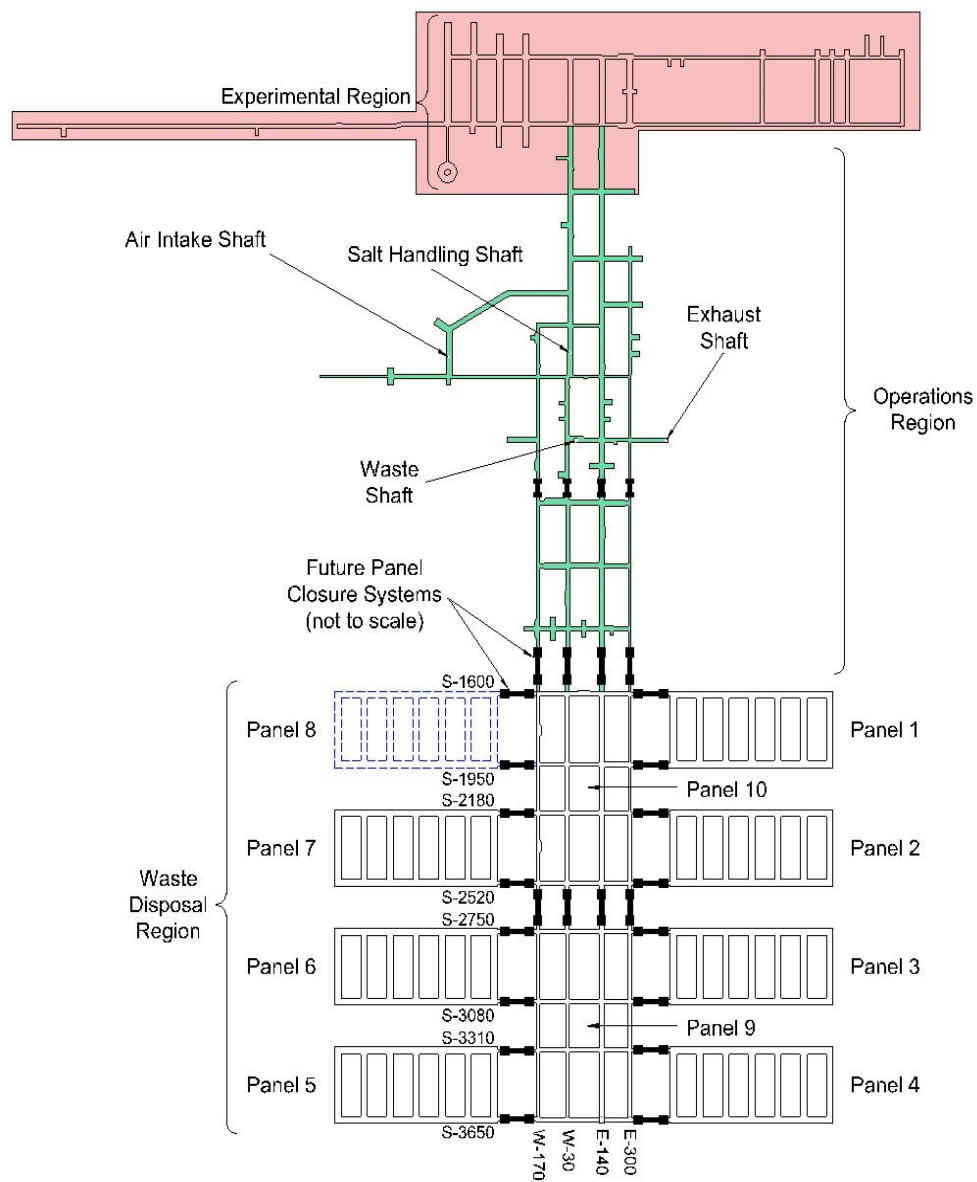
- **DOE plans to submit a Planned Change Request to the U.S. Environmental Protection Agency and a Permit Modification Request to the New Mexico Environmental Department to change the location of Panels 9 and 10**
- **EPA Planned Change Request**
 - **Geotechnical analysis**
 - **Description of change**
 - **Design schematics**
 - **Results of a Performance Assessment**

Geotechnical Issues

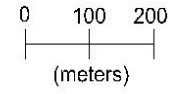
- **Access drifts were initially mined 6 to 30 years ago**
- **Mined access drifts and rooms in Panels 1 through 8 expected to only stay open for five years**
- **Original design includes waste disposal on floors and in walls of transportation and ventilation access drifts once Panels 1 through 8 are filled**
- **Access drifts - currently 14 to 25 ft - will need to be widened to the width of a disposal room (33 ft) to accommodate RH disposal equipment**

Geotechnical Issues

- **Analyses were conducted to evaluate operational feasibility and safety aspects of original design**
 - **The surrounding rock in the older drifts is highly fractured**
 - **High convergence rates and roof beam separation have been observed when drifts are widened**
 - **Widening drifts for RH disposal presents geotechnical issues**
- **Based on these facts and operational requirements it may not be possible to continue to safely support some of the areas upon widening**



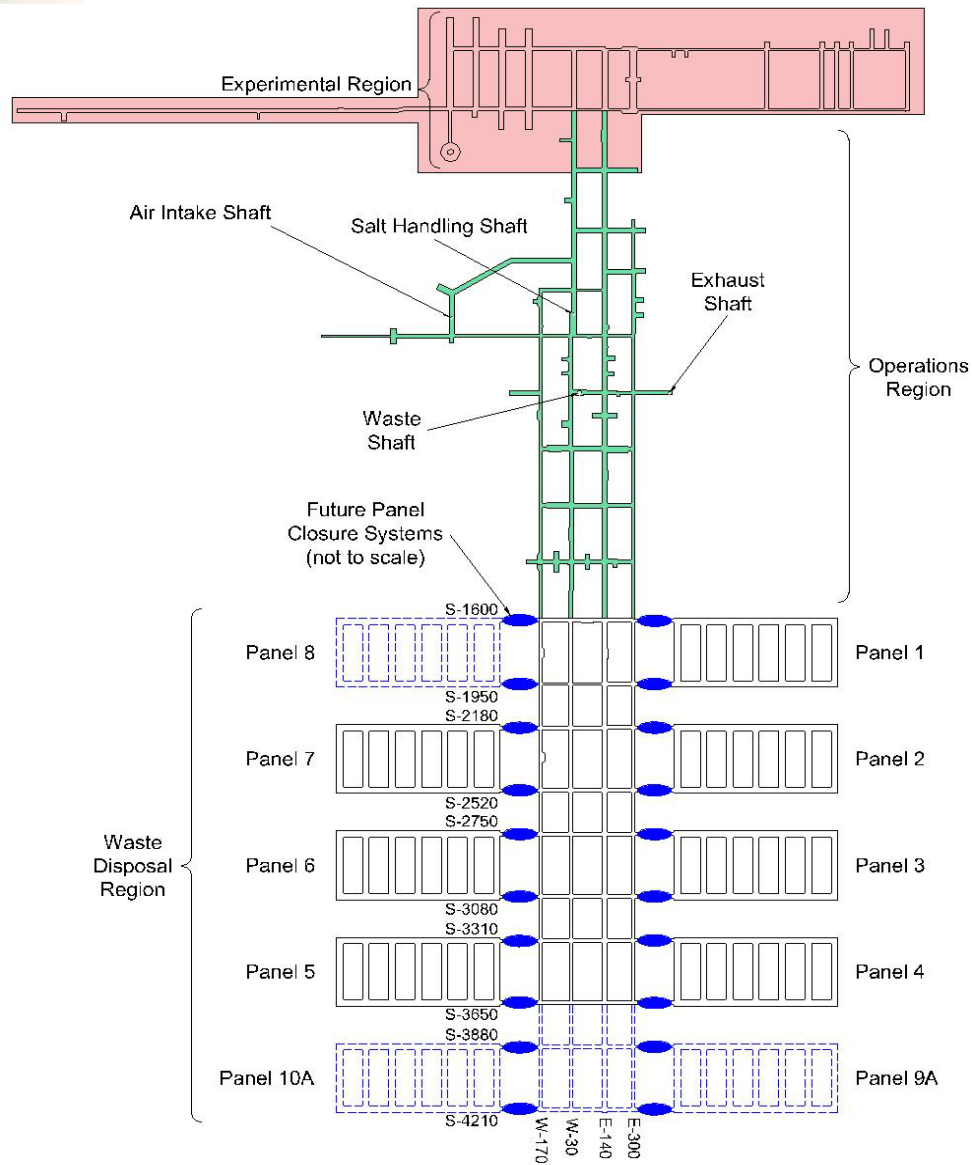
Note: For illustrative purposes only.



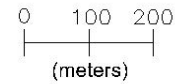


Proposed Design

- **The new waste disposal Panels 9A and 10A will be located to the south of Panels 4 and 5**
- **Proposed design will have an open central area with panel closures installed at openings of each panel**



Note: For illustrative purposes only.



Performance Assessment

- The impact of the proposed repository reconfiguration on long-term repository performance has been evaluated with a PA that represents the relocation of Panels 9 and 10.
- The PA (PC3R) evaluated the effects of relocating Panels 9 and 10 and the panel closure redesign.

Integration with Regulatory Agencies

- DOE plans to submit the changes (to EPA and NMED) and for their review and approval process in parallel
- DOE will be conducting meetings
 - Regulatory agency briefings
 - Stakeholder input

Regulatory Changes and Processes

- **Current Hazardous Waste Facility Permit limits waste disposal to Panels 1 through 8**
- **Regulatory approval to relocate Panels 9 and 10 must be requested and obtained from the U.S. Environmental Protection Agency (EPA) and the New Mexico Environment Department (NMED)**

Summary

- **Geotechnical concerns identified with disposing of waste in access drifts (Panels 9 and 10)**
- **DOE has prepared the regulatory documentation to request a change to move the location of Panels 9 and 10 to south of Panels 4 and 5**
- **Documentation will be provided separately to each regulatory agency but in parallel**