Nevada National Security Sites

Overview

From 1951 to 1992 a total of 100 atmospheric and 828 underground nuclear weapons tests were conducted at the Nevada National Security Sites (NNSS). As a result, some groundwater, surface soils, and industrial-type facilities were contaminated at the NNSS and the surrounding Nevada Test and Training Range. The EM Nevada Program is responsible for cleanup of these historic nuclear testing locations and support facilities. In addition to its remediation mission, the EM Nevada Program manages the safe and secure disposal of waste on the NNSS in support of cleanup and activities at federal sites across the United States involved in nuclear research, development, testing, and ongoing national security and science missions.

Calendar Year 2023 Accomplishments

- **Completed the safe demolition of four ancillary structures at the Test Cell C (TCC) facility that were part of the former Nuclear Rocket Development Station — an EM 2023 priority**
- **Advanced to the "model evaluation" stage at Pahute Mesa, the final of four groundwater regions on the NNSS, marking a major step towards achieving regulatory closure**
- **Supported the safe and secure disposal of more than 600,000 cubic feet of low-level waste (LLW), mixed low-level waste (MLLW), and classified waste**

A look at a slice of the Pahute Mesa groundwater region from a distance.

Planned Cleanup Scope 2024–2034

The EM Nevada Program continues to work towards the completion of the model evaluation phase for Pahute Mesa, including groundwater well drilling, and transition of the groundwater corrective action area into long-term monitoring. This action will complete the EM Nevada Program's groundwater mission at the NNSS and will culminate in the transfer of oversight responsibilities for closed groundwater corrective action areas to a long-term steward.

The Engine Maintenance, Assembly and Disassembly facility (EMAD) and TCC represent the last major demolition and closure efforts currently identified in EM Nevada's environmental remediation mission. Demolition of EMAD and TCC at the NNSS will be addressed in phases, including full demolition of TCC and EMAD ancillary structures; demolition of the "cold," or non-radiologically contaminated portion of Building 3900 at EMAD; and demolition of the "hot" portion of Building 3900 with expected closure in 2031.

Long-term monitoring of sites closed with contamination left in place will remain the responsibility of the EM Nevada Program until completion of its NNSS environmental restoration mission. At that time, responsibility for closed sites will be transferred to a long-term steward.

The EM Nevada Program will continue to support cleanup and activities at federal sites across the United States involved in nuclear research, development, testing, and ongoing national security and science missions by disposing of up to 750,000 cubic feet annually of LLW, MLLW, and classified waste.

Key Regulatory Milestones 2024–2034

EM Nevada Program environmental restoration activities are regulated by the Federal Facility Agreement and Consent Order, an agreement between the State of Nevada and the DOE governing environmental corrective actions at sites impacted by historical nuclear activities. Additionally, an Agreement in Principle between the Department and the state exists to define the Nevada Division of Environmental Protection's role in oversight of NNSS LLW disposal operations. The federal Resource Conservation and Recovery Act,

An overhead view of Test Cell C Facility on the second day of Building 3220 demolition.

which regulates hazardous waste management, also governs certain aspects of MLLW disposal at the NNSS.

Key Regulatory Milestones remaining for the EM Nevada Program include:

- Closure of Corrective Action Unit (CAU) 578 Miscellaneous Inactive Sites — 2024
- Closure of CAU 572 at TCC — 2026
- Approval of CAU 101/102 Pahute Mesa Model Evaluation Report "Acceptance to Move to Closure" — 2028
- Submittal of Pahute Mesa Groundwater Corrective Action Units Closure Reports — 2029
- Submittal of the EMAD Facility Closure Report — 2031
- Transition of site to Long-Term Stewardship — 2032

Post-2034 Cleanup Scope

The EM Nevada Program is currently scheduled to finish its cleanup mission by 2035, with the legacy cleanup scheduled for completion in 2032. This will ultimately involve the completion of all active environmental restoration activities and the conveyance of remediated sites for long-term stewardship.