# SMALL SITE PROGRESS

"Even with the challenges that remain in the cleanup mission, EM is in a strong position for the future because of our dedicated workforce. With so many accomplishments at each site across the EM complex, it is a true testament to the work ethic and steadfast posture of our federal and contractor employees. With 2023 coming to a close, we are excited about the future as EM continues to turn challenges into opportunities to succeed and advance the EM mission."

- Greg Sosson, Associate Principal Deputy Assistant Secretary for Field Operations, EM-Headquarters

### HIGHLIGHTS

- The EM Nevada Program completed demolition of four ancillary structures located at the Test Cell C Facility at Area 25 of the Nevada National Security Sites an EM 2023 priority.
- A cumulative 14 million tons, about 88% of the uranium mill tailings at the Moab Site, was safely transported to the Crescent Junction disposal site—an EM 2023 priority.
- Initiated demolition of Building 251, the high-risk Heavy Element Facility at the Lawrence Livermore National Laboratory site by removing hazards and waste—an EM 2023 priority.
- The Energy Technology Engineering Center removed 24,000+ gallons of contaminated groundwater at the Former Sodium Disposal Facility at the Santa Susanna Field Laboratory site.

## EM NEVEDA DEMOLITION, GROUNDWATER & WASTE DISPOSITION ACHIEVEMENTS

After months of preparatory work and hazard reduction activities, the EM Nevada Program completed a scheduled demolition and an EM 2023 priority at the Test Cell C (TCC) Facility at the Nevada National Security Sites (NNSS) with the safe demolition of four ancillary structures that were part of the now inactive Nuclear Rocket Development Station.



An aerial look at the demolition of ancillary structures at TCC early in the demolition work and following completion of the work.

The Underground Test Area (UGTA) team continued conducting sampling and well site cleanup for the EM Nevada groundwater program. The team achieved a major milestone at the final groundwater region of four at the NNSS, Pahute Mesa, where the UGTA team advanced to the "model evaluation" stage. This marks a significant step towards achieving regulatory closure at Pahute Mesa.

Nearly 600k cubic feet of low-level (LLW) and mixed low-level waste (MLLW) were disposed of at the Area 5 Radioactive Waste Management Complex, which accepts LLW and MLLW from federal U.S. sites involved in nuclear research, development and testing, and ongoing national security and science missions.

#### **MOAB COMPLETES KEY PROJECTS**

Moab Uranium Mill Tailings Remedial Action Project successfully completed several key projects this year including demolishing the last remaining legacy building from the Atlas Minerals Corporation, decommissioning 14 autoclaves, and safely transporting the tailings, debris, and contaminated soils and asbestos waste to the Crescent Junction disposal site. Also completed was the final expansion of the Crescent Junction site disposal cell.

Quarterly public meetings provided stakeholders with the opportunity to engage in the development of the end-state vision for the Moab Site.



*EM Moab staff celebrate the 14-million-ton milestone at the site.* 

#### LLNL SETS THE STAGE FOR NEXT PHASE OF D&D WITH ABATEMENT AND HAZARD REMOVAL

EM's partnership with the Lawrence Livermore National Laboratory (LLNL) and the U.S. Army Corps of Engineers continues to pave the way for new facilities at the lab's one-square-mile footprint. Work focused heavily on deactivation and decontamination preparations for four buildings and slab demolition projects in 2024.

#### ETEC FOCUSES ON PRESERVATION EFFORTS AND GROUNDWATER MEASURES

Energy Technology Engineering Center (ETEC) continued cleanup efforts at the Santa Susana Field Laboratory (SSFL) site with a focus on groundwater interim measures, biological and cultural preservation, and ongoing soils planning with the state of California.

EM continued interim groundwater measures, removing a program total of 24,000+ gallons of contaminated groundwater at the site. In 2023 ETEC removed 8,500+ gallons of contaminated groundwater, analyzed over 100 groundwater samples, and used five wells to extract the groundwater at the Former Sodium Disposal Facility to better understand the groundwater remediation needed at ETEC. Volatile organic compound impacted groundwater concentrations were reduced by ~95%, from 10,000 parts per billion in 2017 to less than 500 parts per billion.

EM engaged with tribal cultural representatives to review groundwater interim measures and, as part of cultural preservation efforts, participated in SSFL Sacred Sites Council meeting where tribal leaders provided guidance regarding areas of cultural importance to senior leaders from the state of California and other site cleanup parties. Staff biologists continue to monitor and ensure that work at the site preserves the unique environment at SSFL, including local wildlife and plants, such as the endangered Braunton's milk-vetch.



Braunton's milk-vetch, an endangered short-lived perennial plant in the pea family, is being monitored by biologists to ensure its preservation on the SSFL site.