

EM LOS ALAMOS FIELD OFFICE (EM-LA)

“This year, the EM Los Alamos Field Office and our cleanup contractor continued steady progress on key Los Alamos National Laboratory legacy cleanup campaigns. We completed all of our fiscal year 2022 milestones under the 2016 Compliance Order on Consent early or on time. Additionally, we exceeded our fiscal year 2022 goal for transuranic waste shipments to the Waste Isolation Pilot Plant by more than 70 percent. In 2022, EM-LA began two key initiatives that reinforce our dedication to increase meaningful stakeholder engagement—the Justice40 Initiative and the development of an EM-LA strategic vision. These initiatives will help ensure the communities that have been impacted by contamination and waste from legacy operations at Los Alamos have a say in the future cleanup.”

- Michael Mikolanis, Manager, Environmental Management Los Alamos Field Office

HIGHLIGHTS

- Continued successful operations of the Chromium Interim Measures system to control and characterize the hexavalent chromium plume while developing a strategy to transition to a final remedy.
- **Completed 52 transuranic waste shipments to the Waste Isolation Pilot Plant—surpassing an EM 2022 priority.**
- Initiated the first corrugated metal pipe retrieval from Technical Area 54, Area G.
- Completed 18 of 18 2016 Consent Order Appendix B milestones with the New Mexico Environment Department for fiscal year 2022.
- **Implemented Justice40 Initiative efforts—an EM 2022 priority**, and conducted more than 30 engagements with Pueblos, stakeholders, and the public.
- Began an EM-LA strategic vision plan with stakeholder input for remaining legacy cleanup campaigns at the Los Alamos National Laboratory site.

MOVING TOWARD GROUNDWATER CONTAMINANT PLUME FINAL REMEDY

Sustained operations of the Chromium Interim Measures system—a combination of extraction, treatment, and injection—to control the hexavalent chromium plume remained a top priority in 2022. EM-LA submitted an updated Chromium Interim Measures and Characterization Campaign Work Plan to the New Mexico Environment Department to meet three primary objectives: (1) prevent migration of the plume beyond the Los Alamos National Laboratory (LANL) site boundary; (2) close data gaps to conduct a corrective measures evaluation; and (3) propose a strategy for the transition to a more full-scale extraction solution. To date, more than 400 million gallons of water has been treated (about 600 Olympic size swimming pools), and 682 pounds of hexavalent chromium has been removed from the regional aquifer.



A crew member checks an Ion Exchange Unit where groundwater contaminated with hexavalent chromium is treated as part of the Interim Measures operations.



A TRU waste shipment departs for WIPP in Carlsbad, New Mexico, for permanent disposal. Comingling shipments with Triad/National Nuclear Security Administration, which is supported by the Defense Nuclear Facilities Safety Board, has enabled EM-LA to maximize legacy waste shipments as well as minimize the number of trucks on the roads to WIPP.

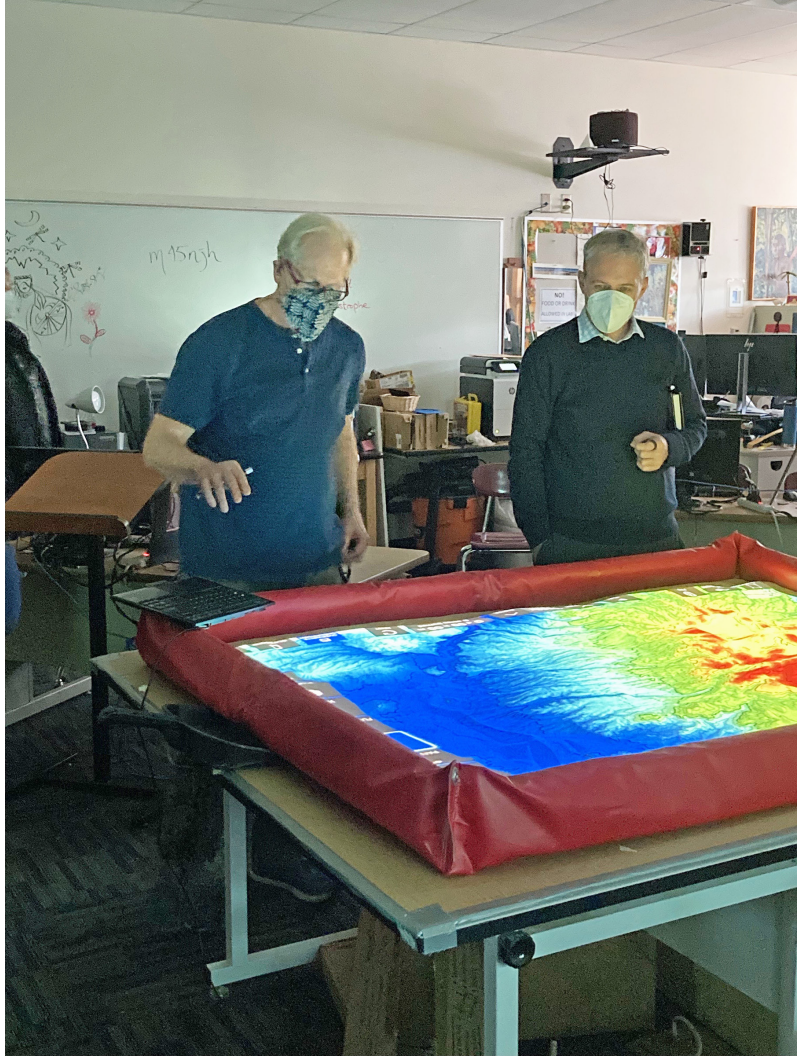
EXCEEDING LEGACY WASTE SHIPMENT GOALS

EM-LA and its cleanup contractor exceeded the 2022 fiscal year transuranic (TRU) waste goal of 30 shipments to the Waste Isolation Pilot Plant (WIPP) by over 70 percent. The TRU waste shipments included more than 130 cubic meters of waste. EM-LA topped an additional goal by shipping 350 containers of mixed low-level and low-level radioactive waste off-site—outpacing the fiscal year 2022 goal by 100 containers.

EM-LA commenced retrievals of the 158 corrugated metal pipes (CMPs)—containing cemented waste from a former LANL radioactive liquid waste treatment facility—at Technical Area-54, Area G. After retrieval, the CMPs will be characterized and resized for shipment to WIPP.



Crews at Technical Area-54, Area G use a mobile-loading unit to place containers of legacy TRU waste at LANL into casks for transport to WIPP.



While visiting the Santa Fe Indian School, EM Senior Advisor Ike White (right) receives a demonstration on how an augmented reality sand table uses Graphical Information Systems for modeling wildfire behavior and watershed locations.

ADVANCING JUSTICE40 INITIATIVE EFFORTS

In January, EM-LA began implementing its Justice40 Initiative efforts as part of the Biden-Harris Administration's commitment to environmental justice. Inaugural Justice40 Initiative engagements were conducted with stakeholders, Pueblos in northern New Mexico, local community organizations, and the public to develop a deeper understanding of how EM-LA could further support disadvantaged communities. These engagements led to strengthening the Los Alamos Pueblos' Project by collaborating with the four Accord Pueblos (Cochiti, Jemez, San Ildefonso, and Santa Clara) to build capacity within their environment departments to perform additional sampling and monitoring. EM-LA is also actively pursuing new opportunities under its current grant with the Santa Fe Indian School.