# LOS ALAMOS NATIONAL LABORATORY

"In 2021, the EM Los Alamos Field Office continued to achieve progress in its mission of environmental remediation and legacy waste management to address the legacy cleanup at Los Alamos National Laboratory. In 2022, EM-LA will remain focused on removing legacy waste from Los Alamos, protecting groundwater with the Chromium Plume Interim Measure as we prepare a strategy for a final remedy, and completing the Middle DP Road cleanup. Public engagement is very important to EM-LA's cleanup mission. As the EM-LA Manager, it is my priority to maintain regular engagement with our regulators, stakeholders, Pueblos, and the surrounding community."

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

#### HIGHLIGHTS

- Certified and completed more than 30 legacy TRU waste shipments to WIPP – an EM 2021 priority.
- Completed all 14 proposed Consent Order milestones with the New Mexico Environment Department (NMED) for fiscal year (FY) 2021.
- Processed and repackaged approximately 130 cubic meters of TRU waste and approximately 190 cubic meters of LLW.
- Shipped 1,317 cubic meters (6,327 55-gallon drum equivalents) of legacy LLW to off-site disposal facilities.
- Treated more than 110 million gallons of hexavalent chromium contaminated groundwater while operating the Chromium Interim Measure.
- Completed the planned investigation and excavation of 124 unique locations along DP Road in the Los Alamos townsite.
- Conducted surface and storm water monitoring at 200 locations, constructed 33 storm water controls, and conducted more than 3,900 surface water infrastructure inspections.

### PRIORITIZED TRANSURANIC WASTE SHIPMENTS

Legacy waste operations at Technical Area (TA) 54
Area G remained a top priority for 2021. Through
a collaboration with EM's cleanup contractor, the
NNSA Los Alamos Field Office (NA-LA), and Los
Alamos National Laboratory's (LANL) Management
and Operating (M&O) contractor, the Environmental
Management-Los Alamos Field Office (EM-LA)
increased efficiency in contact-handled TRU waste
shipments. Combining legacy and new-generation
radioactive waste together maximizes resources
while safely shipping waste off site for disposal.
During 2021, EM-LA completed 32 legacy TRU
waste shipments to WIPP — a substantial increase
over 2020.



Waste operations at TA-54 at LANL.

achievement in EM-LA's efforts to shrink the plume and protect area water quality until a final remedy is determined. The combination of extraction, treatment and injection has controlled downgradient migration, and resulted in a significant reduction in the extent of contamination along LANL's boundary with the Pueblo de San Ildefonso. Two new wells have been installed to further characterize the plume.

## REMEDIATED MANHATTAN PROJECT-ERA CONTAMINATION ON COUNTY LAND

At the Middle DP Road Site, EM-LA completed characterization and removal of soil and debris contaminated with low levels of radioactivity from historic LANL operations. The characterization and excavation work were performed concurrently to minimize disruption on Los Alamos County property. Confirmation sampling will determine if additional excavation is required to meet residential risk standards. EM-LA will coordinate with NMED, NA-LA, and Los Alamos County for project completion in 2022.



A crew worker screens debris mixed with soil for radiological activity.

### ADVANCED THE CHROMIUM INTERIM MEASURE

The operation of the interim measure to control migration of a hexavalent chromium groundwater plume beneath LANL marked a major 2021



A drilling contractor advances casing during construction

of Well R-71.

#### THE JUSTICE40 INITIATIVE

EM is proud to have EM-LA selected as one of the five DOE pilot programs for the Justice40 Initiative. EM is committed to continuing to invest in communities that have been affected by decades of nuclear defense research at LANL. The Justice40 Initiative provides recommendations on how certain federal investments might be made toward a goal that 40 percent of the overall benefits flow to underserved communities. DOE has a history of engaging with underserved communities in the area surrounding LANL. EM-LA will continue to work with these communities and to invest in their future.