

EM Updates Cleanup 'By the Numbers'



By the Numbers

Nevada National Security Site

Updated May 2022

In 2021, EM Nevada initiated characterization and hazard reduction activities to prepare for demolition and closure of two legacy facilities at the NNS, the Engine Maintenance, Assembly, and Disassembly Facility (EMAD) and Test Cell C (TCC). EM Nevada also obtained regulatory approval of data completeness for the Pahute Mesa groundwater region – the last active groundwater corrective action area at the Site.

Updated 2022 Numbers:

- Total fiscal year 2022 EM Nevada Budget: **\$76 million** (Includes FY22 appropriation for enhancements to Real Time Radiography capabilities at NNS);
- **More than 3.6M** hours worked over the course of 15 years by EM Nevada Program Federal and environmental program services contractors and staff without a lost workday;
- Emergency preparedness funding distributed to counties since 2000: **more than 15.6M**;
- **51.9M cubic feet** of low-level waste disposed at NNS since 1961;
- **66M** saved in federal funding when EM Nevada completed corrective actions at soil sites six years ahead of schedule in 2019;
- **>60** years of groundwater data collection is used by scientists to understand groundwater contamination to provide for the protection of public health and safety; and
- **3 of 4** main groundwater regions at the NNS have been successfully transitioned to long-term monitoring.

By 2028

EM Nevada anticipates reaching regulatory closure at Pahute Mesa, the fourth and final active groundwater region at the NNS.

99%

EM Nevada has completed cleanup at 99% of all industrial-type sites identified in the program's environmental restoration scope to-date.

Only 2

large legacy industrial-type sites remain: EMAD and TCC facilities.



Constructed in 1965

at a cost of more than **\$50 million**, EMAD was once the largest hot cell in the world. The **80-foot tall** building contains **100,000 square feet** of floor space.



TCC is anticipated to generate **18,500 cubic yards** of waste, or about **1,200 truckloads**.



EMAD is anticipated to generate **120,000 cubic yards** of waste, or about **6,500 truckloads**.





U.S. DEPARTMENT OF ENERGY OFFICE OF ENVIRONMENTAL MANAGEMENT

The Nevada National Security Site "[By the Numbers](#)" features facts and figures about cleanup and more.



[EM](#) has updated its popular “By the Numbers” feature, which illustrates cleanup progress at EM sites through quick and clear infographics.

Facts and figures on each major EM site, plus the Savannah River National Laboratory, can be found [here](https://www.energy.gov/em/articles/em-numbers) [https://www.energy.gov/em/articles/em-numbers]. Each site page also features a key look forward, in gold lettering, to an anticipated achievement over the next decade, as described in more detail in the [Strategic Vision 2022-2032](https://www.energy.gov/em/annual-priorities-strategic-vision) [https://www.energy.gov/em/annual-priorities-strategic-vision], a blueprint to the program’s anticipated accomplishments over the next decade that will protect the public and environment.

Some tidbits from the new “By the Numbers:”

- 951 facilities, many contaminated, have been demolished at the [Hanford Site](#).
- More than 61,000 cubic meters of managed transuranic and mixed low-level waste at the [Idaho National Laboratory Site](#) has been shipped offsite for disposal.
- 40 monitoring, extraction and injection wells have been installed in and around the hexavalent chromium plume at the [Los Alamos National Laboratory Site](#). These wells and associated infrastructure support characterization and migration of the plume via an interim measure.
- More than 12.6 million tons of tailings at the [Moab Uranium Mill Tailings Remedial Action Project](#) have been shipped for disposal, amounting to 78% of the total tons.
- 51.9 million cubic feet of low-level waste has been disposed at the [Nevada National Security Site](#) radioactive waste disposal facilities since 1961.
- 1,277 acres of land has been transferred to the local community for reuse and economic redevelopment at the [Oak Ridge Site](#).
- 642,599 pounds of waste at the [Paducah Site](#) was recycled in 2021, avoiding disposal.
- EM completed the demolition of all remaining DOE-owned buildings at the [Energy Technology Engineering Center](#) in 2021.
- More than 977.2 million gallons of groundwater from four onsite plumes have been treated and are currently managed by pump-and-treat and slurry wall technology at the [Portsmouth Site](#).
- More than 4,300 canisters of glassified radioactive waste have been produced at the Defense Waste Processing Facility since it began operations in 1996 at the [Savannah River Site](#).
- 29,000 square feet of building footprint have been demolished at the [Environmental Management Consolidated Business Center-New York Project Office](#) (formerly the Separations Process Research Unit).
- 71,320 cubic meters of waste have been disposed in the underground mine at the [Waste Isolation Pilot Plant](#).



- More than \$5 billion in complex-wide savings for the EM program have been achieved due to innovations developed in the past 10 years at the [Savannah River National Laboratory](#).
- More than seven miles of piping and over 50 tons of vessels and equipment have been removed from predominantly high-hazard areas of the former reprocessing plant at the [West Valley Demonstration Project](#).

West Valley Upgrades to New Security Facility as EM Approaches Next Cleanup Stage



EM crews build a new security guard house at the West Valley Demonstration Project.

WEST VALLEY, N.Y. – As [EM](#) prepares for the next chapter of cleanup at the [West Valley Demonstration Project \(WVDP\)](#), crews are constructing a new security guard house that provides more space for officers with updated offices, modern equipment, badging for site staff and storage space.

“It’s important that we provide our security force with the tools they need to perform their jobs effectively and efficiently,” said Jennifer Dundas, EM WVDP Safety and Site Programs Team leader. “This new facility and more modern equipment will help our security force to be better prepared to protect and serve our workforce and the site.”

The existing guard house was built in the early 1980s when cleanup at the site began. It has served its purpose over the years, but the site has outgrown its current capabilities. This new facility will better support the continued needs



of the site as EM progresses toward the next phase of cleanup: the start of demolition of the [Main Plant Process Building](#), an [EM 2022 priority](#).

“Our current guard house is more than 40 years old and needed to be replaced,” said David Schuman, safeguards and security manager for EM cleanup contractor CH2M HILL BWXT West Valley. “This new facility will enhance our security presence and effectiveness, and improve officer and employee safety. Improving our ability to support the site helps us to better handle any situation that may arise.”

-Contributor: Joseph Pillittere