

American Nuclear Corporation

Time-Critical Removal Overview

Time-Critical Removal Action Progress: The United States Environmental Protection Agency (USEPA) began the time-critical removal action (TCRA) at the American Nuclear Corporation Site (Site) and mobilized with the EPA's Emergency and Rapid Response Services (ERRS) Contractor and a local Radiation Safety Officer (RSO) subcontractor in March 2024. The scope of the cleanup was to remove radiologically contaminated soils on-site, and demolish and remove on-site buildings impacted with radionuclides, which included the Hot Cell. All waste on-site is classified as Low-Level Radioactive Waste (LLRW) and is being transported via rail to its final disposal location, Waste Control Specialists, located in Texas.

During the period of March 2024 to December 2024, the USEPA has demolished and disposed of the office building, demolished/disposed of the Hot Cell, removed/disposed of all concrete and piping from within the Hot Cell building footprint, and soils have been excavated roughly five feet below ground surface. Once soil removal within the building footprint is complete, the remainder of the building will be demolished and disposed of.

The mounded area outside of the Hot Cell building has been excavated and all buried vaults/materials have been removed and disposed of. Residual contamination in the mound footprint is still present and excavation continues.

The RSO monitors dose exposure for all site personnel and utilizes time, distance, and shielding to maintain the principle of "As Low as Reasonably Achievable" (ALARA) for handling of the contaminated material on-site to keep personnel exposure below regulatory limits. The RSO also collects samples from storm water collection points to ensure no migration of contamination across (or off) the property occurs. The Tennessee Department of Environment and Conservation (TDEC) Division of Radiological Health (DRH) continues their routine surveying and sampling around the perimeter of the property and at off-site drainage locations to ensure contamination does not migrate off-site.

The USEPA estimates approximately six more months of field work at the Site. See below for 2024 metrics and an estimated outlook for 2025 metrics.

Site Cleanup Metrics as of December 2024:

- *LLRW Soil Disposed Off-Site:* 4,500 tons
- *LLRW Debris Disposed Off-Site:* 378 tons

Outlook for 2025:

- *LLRW Soil Remaining:* ~5,000 tons
- *LLRW Debris Remaining:* ~550 tons
- Field work estimated to be complete by June 2025.



Figure 1. Mounded Area Pre-Excavation



Figure 2. Mounded Area Post-Excavation



Figure 3. Hot Cell Pre-Demolition



Figure 4. Hot Cell Post-Demolition