

Background

The 324 Building, located in Hanford’s 300 Area, supported research on radioactive materials from 1966 to 1996. Demolishing the building and remediating contaminated soil below the facility – designated the 300-296 Waste Site – are top priorities for the U.S. Department of Energy (DOE) and contractor Central Plateau Cleanup Company (CPCCo) due to their proximity to the Columbia River and city of Richland.

Demolition operations were postponed in 2010 after workers detected significant contamination in the soil under one of the building’s “hot cells” that shielded workers from radiation while they used remotely operated equipment to conduct research. The contamination likely came from a spill of radioactive materials from one of the hot cells called B Cell.

While stabilizing the 324 Building in 2022 before excavating the contaminated soil through the floor of the hot cell, CPCCo crews detected additional soil contamination. Analysis by CPCCo and the Pacific Northwest National Laboratory completed in 2023 confirmed the area of contaminated soil is wider and deeper than previous measurements.

Future

Due to the larger volume of contaminated soil under the building and the additional challenges of maintaining an aging facility, DOE and CPCCo changed previous demolition and remediation plans to an approach that is safer for workers and the community and is still protective of the Columbia River.

Working with the U.S. Environmental Protection Agency, DOE and CPCCo are resequencing the work. Crews will demolish the building first, then construct a containment superstructure over the remaining foundation and remediate the contaminated soil below.

The 324 Building remains in a safe and stable configuration. The contaminated soil beneath the structure has remained stable for decades, and underground monitoring shows the contamination has not migrated toward groundwater.

Crews will continue to monitor the soil and groundwater to ensure worker and public safety and health as they prepare the facility for demolition.



The 324 Building supported key projects, such as various waste treatment experiments and President Eisenhower’s “Atoms for Peace” initiative.



Workers dressed in protective clothing remove waste from a hot-cell airlock for disposal.



Workers conduct annual maintenance on the 324 Building ventilation stack.

