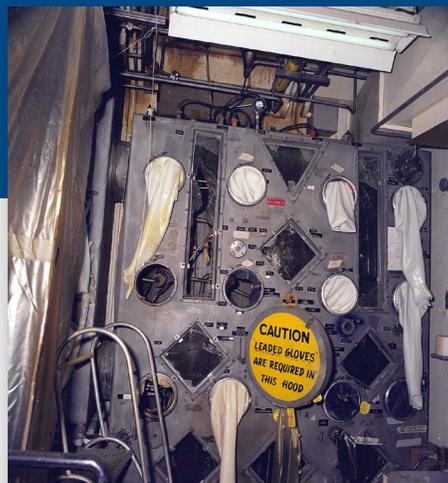


# Plutonium Finishing Plant 242-Z Americium Recovery Facility



Inside the "McCluskey" room, a highly contaminated area within the 242-Z Facility

## McCluskey Room

One key challenge in decommissioning the 242-Z Facility is the "McCluskey" Room.

In 1976, a reaction occurred within a glove box, causing the glove box to explode. The event contaminated 64-year-old Harold McCluskey, a senior chemical operator working nearby. The room was placed in safe condition and sealed shut.

McCluskey survived and received five months of treatment to remove most of the heavy metals from his body. He lived in the Tri-Cities until his death, 11 years later, from an unrelated heart condition.

Few entries were made in the facility in the decades following the incident until 2010 when CH2M HILL resumed entries to remove combustible materials and some equipment. Crews safely completed more than 200 entries into the highly contaminated and highly controlled area.

In 2014, crews wearing special respirators and multiple layers of protective equipment, will reenter the room to finish the decontamination and decommissioning process.

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Plateau Remediation Company

*U.S. Department of Energy contractor CH2M HILL is safely decommissioning a hazardous, highly contaminated and historical facility at the Hanford Site in southeast Washington state.*

CH2M HILL is decommissioning the 242-Z Americium Recovery Facility as part of the overall mission to safely and compliantly decommission and demolish Hanford's Plutonium Finishing Plant. The Plutonium Finishing Plant once produced two-thirds of the plutonium used for the nation's defense.

The 242-Z facility housed process tanks and glove boxes used to reclaim plutonium and americium from waste produced at the plant. Equipment associated with processing must be decontaminated and made safe for removal before the facility can be demolished.

Entering the facility is no easy task. Due to high contamination levels, workers are required to wear multiple layers of protective gear and use supplied breathing air. Each entry is highly coordinated and choreographed and requires a large support team to assist in the dress, undress, monitoring and the work.

Entering the 242-Z Americium Recovery Facility represents not only part of the history of the Hanford Site, but also the progress CH2M HILL is making toward demolishing the Plutonium Finishing Plant.

## 242-Z at a Glance

- *Tasks: Improve ventilation, decontaminate and remove processing equipment*
- *Hazards: Radiological, chemical, congested space, old and degraded equipment*
- *Teams: Four employees can enter at once due to space and support limitations*
- *Support: At least 15 workers required to support a team of four workers inside the facility*



Worker involvement will allow employees to safely and efficiently enter 242-Z. Employees researched and helped select the respirators and suits that will be used for this task. Employees also developed training courses for their coworkers on how to properly use the new equipment.

