

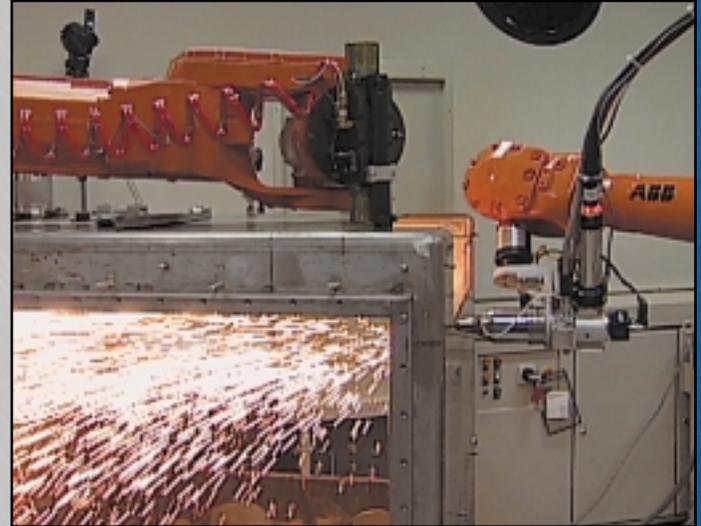
# RIVER CORRIDOR

## Expectation:

Safely deactivate contaminated facilities, including several near the Columbia River, to reduce risk to workers and the environment while decreasing cost to taxpayers.

## 324 Building Deactivation Update:

- Successfully demonstrated that commercially available lasers and robotic arms could remotely cut gloveboxes into disposable pieces, improving the safety and speed of the process.
- Several critical repairs to the aging in-cell cranes are ongoing to allow cleanup progress to continue in B Cell. The cranes were designed to aid chemical and materials research and were not built to dismantle and remove equipment, so frequent failures occur, slowing cleanup. The repair work requires dozens of manned entries into high-dose, contaminated environments, and has been safely conducted without incident using the Automated Job Hazard Analysis process.



*A laser head guided by a robot arm precisely cuts out a section of a glovebox, while a second robot arm grips the piece for removal and placement in a waste drum. The demonstration proved the robotic technology is safer and faster.*



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## 327 Building Deactivation Update:

- Packaged and removed all fuel items from I Cell. We can now focus on removing the rest of the equipment in this hot cell.
- Completed inventory and verification of 30 Pacific Northwest National Laboratory legacy waste buckets at the facility on schedule.

## Accelerated Deactivation Update:

- Disconnected and capped off five sprinkler systems for the unoccupied 3706 Building, avoiding \$350,000 a year in heating costs to protect the fire system from freezing.
- The 200-Area accelerated deactivation team was nominated for this year's DOE Pollution Prevention Award: they saved \$345,000 recycling four 34-volt batteries from a battery-operated locomotive once used at the deactivated Plutonium/Uranium Extraction (PUREX) facility.



*Cleanup in Hanford's 300 Area comprises much of the River Corridor Project (RCP). Accelerated deactivation work, an important aspect of the RCP scope, also involves several small facilities in the 200 Areas, such as the shut down Transuranic Waste Storage and Assay Facility, known as TRUSAF.*

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## Safety Update:

- River Corridor employees completed a full year without a work-related lost-time injury, despite the potential risks inherent with their decontamination tasks.

## What's Next:

- Continue 324 Building B-Cell cleanout activities, including use of remote manipulators to cut up and package the last of 12 two-story equipment racks.
- Transfer grouted waste containers from B Cell to A Cell. Then, initiate nine careful shipments with a special cask and liner to move the highly radioactive containers to compliant storage in the 200 Area. The reusable cask must be decontaminated between shipments.



*Retrieving more than 300 soup-size cans of radioactive material from a storage carousel 10 feet below the 327 Building canyon*

*floor requires raising a long tube high overhead to remove each can. Using good safety-management techniques, the work team effectively eliminated a potential hazard from an open electrical bus bar located overhead, so that retrieval work proceeds safely.*

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