WV Demonstration Project completes another phase in demolition activity

WEST VALLEY — The process crane weighing 38,000 pounds was successfully removed from the Vitrification Facility by utilizing lessons learned from the safe removal of the cell’s four coolers; and extensive planning, engineering controls and historical best practices.

“Using lessons learned and a deliberate approach are one of the best combinations for safety and success,” CHBWV President Jeff Bradford said. “They continue to complete the demolition of the Vitrification Facility in a safe and compliant manner.”

Workers at the West Valley Demonstration Project (WVDP) removed the process crane as part of their Vitrification Facility demolition project. This particular work evolution is part of the Phase 2 demolition work associated with this project and allows crews to continue on with the demolition of this facility.

“Once again the CHBWV Team did an excellent job in utilizing their planning and execution of this high hazard work,” WVDP Director Bryan Bower said. “This paves the way for the safe continuation of the Vitrification Facility demolition.”

Prior to the start of the removal process, crews sprayed a fixative to the crane for additional contamination controls. Crews used a large excavator with a hydraulic hammer to break away the crane rails on both sides to free the crane from its location. Switching to another large excavator with a grapple attachment, the crane and its hoists were lowered to the floor of the Vitrification Facility, where crews then performed additional contamination controls.

Over the next few days, the crane was size reduced for packaging and shipping based on size, dose rates and weight.

The Vitrification Facility produced 278, 10-foot-tall canisters of vitrified high-level waste between 1996 through 2002. It was one of only two facilities to operate in the United States. The facility contains radiological and hazard contaminants as a result of HLW vitrification activities.

The facility’s process crane was used to handle canisters throughout the Vitrification Cell. Full canister handling was a high-level waste activity. The process crane is a twin 4.5 ton hoist/trolley mounted on a bridge. The twin hoists were mounted 32 inches from each other on a turntable which allowed the hoists to rotate 359 degrees. This allowed the hoists to reach closer to the Vitrification Cell walls than would be possible with only a single hoist, and also made load orientation possible.