

OLEAN TIMES HERALD

Wednesday, February 21, 2024

WVDP innovation improves safety, efficiency and costs in cleanup



West Valley Demonstration Project

Demolition equipment using a new automated quick coupler deconstructs the wall of a cell within the Main Plant Process Building at the West Valley Demonstration Project.

By **KELLEN M. QUIGLEY**

kquigley@oleantimesherald.com

WEST VALLEY — The Department of Energy and its cleanup contractor at the West Valley Demonstration Project (WVDP) used innovative thinking to improve safety and efficiency and save taxpayer money by acquiring new automated tools for demolition equipment.

“The WVDP team uses diversity, collaboration and inclusion to its advantage when developing innovation solutions during cleanup activities,” said Stephen Bousquet, EM West Valley Project Management Assistant Director. “Combining their differences and strengths helps the team improve safety, increase efficiency and reduce costs.”

The new tools, known as quick couplers, feature an advanced automatic coupling system that enables an operator to change quickly between various attachments used in cleanup from inside the cab of an excavator while conducting demolition work on the Main Plant Process Building at West Valley.

With this new technology, an operator can change the attachments, such as a hydraulic hammer or shear, within a few seconds without worrying about leaks, kinked hoses, hydraulic issues or misalignment.

OLEAN TIMES HERALD

Wednesday, February 21, 2024

Previously, when an operator needed to switch an attachment, the equipment had to be shut down and workers removed the attachment and hydraulic hoses manually. This takes time and exposes workers to industrial and radiological hazards.

During demolition, an operator may change attachments several times per day. This innovative tool increases versatility and efficiency with no oil or hydraulic spills, which saves time and money, and protects the environment.

“Anytime we can improve safety it’s a winwin for everyone. The WVDP team is always finding innovative ways to challenge today and reinvent tomorrow,” said Tom Dogal, facility disposition manager with CH2M HILL BWXT West Valley, EM’s West Valley cleanup contractor.

The Main Plant is one of the last major facilities remaining at West Valley. Its successful demolition will further reduce environmental risks and position the site for the next phase of cleanup. The demolition is expected to be completed in the fiscal year that begins this October.

FORMER WASTE PACKAGING AREA DEMOLISHED

The WVDP also safely demolished the Waste Reduction and Packaging Area (WRPA) and dock, which were used during former spent nuclear fuel reprocessing operations, high-level waste vitrification and Main Plant Process Building deactivation.

This demolition, which had a lower risk for airborne release, took place simultaneously on the east side of the Main Plant Process Building, while other work which had a higher risk for air-borne release, took place on the west side of the building.

Working simultaneously on two sections of the building improves efficiency as well as saves cost and schedule while staying safe and compliant.

“The WVDP team strives to find solutions to conduct demolition activities in a safe, efficient and deliberate manner,” Bousquet said. “They continue to leverage their combined knowledge and expertise to complete the demolition of this major milestone safely and compliantly.”

The WRPA area was about 1,000 square feet, and the dock added 600 square feet. Both areas were used to package waste and ship it off-site for disposal. At one time, a box compactor was used to compact waste inside metal waste boxes to maximize the waste content of the boxes.

Demolition began at the end of January, and the building structure and dock were demolished over two days. Workers used a large excavator with a hydraulic shear attachment to take down the building.

The completion of this demolition demonstrates the commitment to identifying efficiencies while maintaining a safe and compliant approach to the overall demolition of the MPPB, said Dogal.

“It is collaborations like this, between the workforce, management and DOE that is making the project such a success,” he added.

OLEAN TIMES HERALD

Wednesday, February 21, 2024



West Valley Demonstration Project

Crews use an excavator with a hydraulic shear attachment to demolish the Waste Reduction and Packaging Area at the West Valley Demonstration Project.