

West Valley Takes 'First Bite' of Vitrification Facility in Historic Demolition



Demolition of the Vitrification Facility begins with the "first bite" on Sept. 11.

WEST VALLEY, N.Y. – [EM West Valley Demonstration Project](#) (WVDP) workers kicked off the first-ever demolition of a vitrification facility in the DOE complex on Sept. 11.

They've been getting ready for the historic teardown for years, removing hazards through decontamination and deactivation work.

"We're well prepared for demolition," said Scott Chase, the facility disposition project operations manager for cleanup contractor CH2M HILL BWXT West Valley, LLC (CHBWV). "It's been two years in the planning, and we've looked at it from multiple directions."

Workers will demolish the radiologically "cleanest" areas first, such as the perimeter aisles, then move to the facility's other areas, such as the vitrification cell, which housed all of the major radioactive process equipment. This strategy minimizes the potential for cross-contamination of facility areas and reduces the cost of decontaminating equipment and materials transferred from one area to another.

Crews will control the potential spread of contamination through water misting, encapsulation fixatives, regular housekeeping activities, adherence to established work practices, and full-time monitoring by



radiological control technicians. WVDP will use 16 air monitoring stations located outside the site boundary and others placed around the demolition area to monitor for potential migration of contamination.



CH2M HILL BWXT West Valley Facility Disposition Project Operations Manager Scott Chase was hired to test the pumping system used to transfer high-level waste from the site's underground tanks to the Vitrification Facility, pictured in the background.

Once used to solidify about 600,000 gallons of high-level waste (HLW) liquid and sludge, the 11,000-square-foot, 50-foot-tall concrete structure — one of the site's major remaining facilities — is reinforced with structural steel and sided with sheet steel. Its walls and roof are between 2 and 4 feet thick. Demolition will generate an estimated 6,500 tons of waste for shipment to an offsite licensed disposal facility.

As Chase oversees the teardown, scheduled for completion in eight months, he'll remember the many past and present employees who are part of the facility's legacy.

"Vitrification was an incredible accomplishment that involved a lot of people from beginning to end," said Chase, who joined the WVDP workforce in 1993 as a test engineer. "We got there because of the brains of the people involved. The operators came up with suggestions, the engineers refined the designs, and the mechanics made it happen."



Demolition equipment is staged in front of the Vitrification Facility.

Chase was hired to test the pumping system used to transfer HLW from the site's underground tanks to the vitrification facility. The facility produced 275 canisters of vitrified waste, ending operations in 2002.

A cohort of employees including Chase arrived at the WVDP in the 1990s. They worked to stabilize and remove the site's waste, and now they are taking the site apart, building by building.

Chase recalled a significant event last December when employees made the first manned entry into the cell in more than 20 years. Workers had decontaminated the facility to the point to allow manned entries.

WVDP Project Director Bryan Bower noted the important roles nearly all employees had in successfully vitrifying the waste.

"As we move into the demolition phase of this project, we recognize the positive impact vitrification had on the area and look forward to completing our mission at West Valley," Bower said.

For Chase, Bower, and present and former WVDP employees, demolition of the facility will close the book on a long and successful legacy. It's a legacy to which the old slogan still applies: "Safety and Vit – What a Fit!"

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