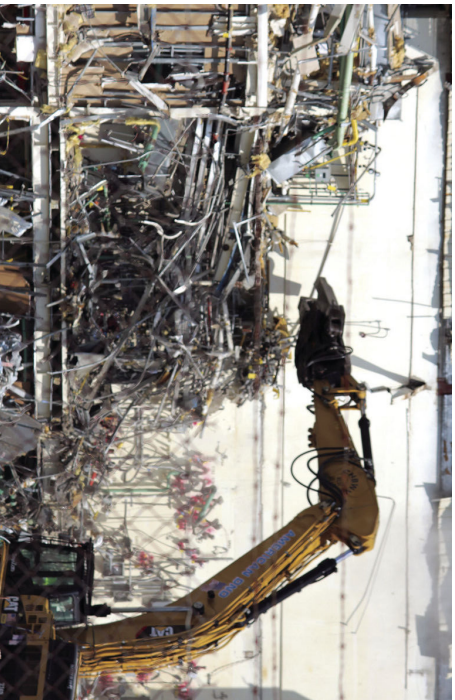


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WVDP ceremony marks start of vitrification facility demolition

By RICK MILLER, Olean Times Herald

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A special excavator from Demolition and Nuclear Decommissioning rips into the exterior portion of the vitrification building at the West Valley Demonstration Project Thursday.

Rick Miller/Olean Times Herald



Bryan Bower (left), director of the West Valley Demonstration Project for the U.S. Department of Energy, talks with others attending Thursday's ceremony marking the beginning of demolition of the vitrification facility that turned radioactive liquid waste into glass. Others from left are: Stacy Charbonneau of the DOE Environmental Management Office, Willis Bixby, who was DOE director at West Valley when the facility was constructed in the early 1990s, and former Ashford Supervisor Bill King.

Rick Miller/Olean Times Herald

WEST VALLEY — The start of the demolition of the vitrification facility at the West Valley Demonstration Project was marked by a celebration Thursday.

As U.S. Department of Energy and New York State Energy Research and Development Authority officials spoke beneath a nearby tent, huge excavators from Demolition and Nuclear Decommissioning continued to tear into the 50-foot-tall vitrification facility.

It helped turn 600,000 gallons of high-level radioactive liquids into glass now contained in 275 10-foot-tall stainless steel canisters. The canisters, still highly radioactive, but unable to leach from the glass sit in 56 concrete containers on a pad adjacent to the nuclear cleanup site.

A remote misting system keeps water focused on parts of the building being demolished, said DOE site director Bryan Bower.

"It's just as effective with a lot less water," he said.

A barn around the building will contain water from any storm events, Bower said. It can be pumped to waiting tanks, and will be tested for any contaminants. Any contaminated water will be put through the treatment plant if necessary.

Former Ashford Supervisor Bill King, 81, who also served on the West Valley Citizens Task Force and worked at the plant when it was processing spent nuclear fuel rods, was also present at the ceremony that officially opened the vitrification facility in 1996. He presented the liquid wastes from the acid process used to reclaim plutonium from spent nuclear fuel rod casings, then mixed the reduced liquids into molten glass.

King showed a souvenir, a piece of blue glass with a "V" pressed into it to signify "vitrification."

"I never thought I'd see this come down," King told Bower before the ceremony.

Jeff Bradford, president and general manager of the contractor, CH2M HILL BWXI West Valley, said the ceremony was to celebrate the success of the start of another major milestone in the cleanup that has cost the state and federal governments nearly \$3 billion.

"It takes years of planning and extremely dangerous work," Bradford told workers and others attending the ceremony. "My hat's off to the guys doing the work on the inside. We have to do it in safety and in compliance."

Brad Frank, a program manager for the New York State Energy Research and Development Authority, said he toured the vitrification facility while it was being built as a high school student. He commended those involved. After testing, the vitrification facility was in use from 1996 to 2002, when the last of the 275 canisters was filled.

The end of the vitrification mission included turning all the liquid wastes into glass — another first in the United States — but closing and decommissioning the building and its equipment, including the melter.

Now comes the last stage, the controlled demolition of the building and packing the pieces into containers for disposal at low-level and other appropriate facilities.

Former DOE site director Willis Bixby, now retired, was at the site when the vitrification facility was constructed and initial testing was underway.

King, the former Ashford supervisor, credited Bixby with initiating the transparency policies and the safety culture pioneered at the WVDP.

"It's quite a legacy," King said, noting DOE sites across the country have groups similar to the West Valley Citizens Task Force.

Bower said West Valley was not only the first DOE site to vitrify its liquid wastes, starting in 1996, but is now the first one to tear down such a facility. The cleanup not only benefits the local Ashford community, but that waste management knowledge benefits other DOE sites as well.

Suey Charbonneau, associate principal deputy assistant secretary for field operations in the DOE's Office of Environmental Management, congratulated the DOE, NYSERDA and the contractor, CH2V, on the progress of the cleanup.

She spoke of "a skyline change" once the verification facility, then the main process building, are demolished over the next few years. The verification building is expected to be torn down by April.

Charbonneau also presented Bradford and Rob Dallas, president of Local 2401 of the International Association of Machinists and Aerospace Workers, with a plaque and flag signifying the site's good work record.

Later, Bixby, who is retired from DOE but represents a company involved in transporting wastes out of West Valley, said, "This is the end of the beginning. They're taking the building down and getting rid of the debris."

He said he found the removal of the melter from the verification building last year like "taking the heart out of the process. It was essential to get to the end of Phase I."

The end of Phase I will come when the main process building adjacent to the newer verification facility is also demolished. That will allow access to the source of a Strontium 90 leak from when the plant was operated. It pooled beneath the building and leached in an underground plume toward a nearby creek.

That plume has since been intercepted with a permeable treatment wall designed to bind radioactive material to the lumpy litter-like material lining a deep trench.

Phase II will involve whether underground tanks that once held highly radioactive liquid and the nearby state and federal landfills filled with low-level radioactive waste should be excavated and removed. That would add billions to the cost of the cleanup.

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