

# First casks with highly radioactive containers moved at West Valley

By RICK MILLER Olean Times Herald | Posted: Friday, November 13, 2015 8:49 pm



## West Valley Demonstration Project

The first 87.5-ton concrete cask containing five stainless steel canisters of highly radioactive glass is moved from the Main Process Building at the West Valley Demonstration Project to interim storage on a concrete pad a few hundreds yards away earlier this week. Fifty-five more casks will be moved over the next three years.

WEST VALLEY — The first huge concrete cask with five containers of highly radioactive waste was moved to long-term outdoor storage earlier this week at the West Valley Demonstration Project.

A spokeswoman for CH2M HILL BWXT West Valley, LLC, the site cleanup contractor, said Thursday morning the first high-level waste cask was moved Tuesday from the Main Process Building to a large concrete pad several hundred yards away.

The 87.5-ton concrete cask, with a 50-year minimum design life, was moved down a reinforced haul road to the on-site interim storage pad. Fifty-five more are scheduled to join it over the next few years, said Lynette Bennett of CH2M Hill BWXT West Valley.

Five containers of high-level waste will be transferred to each stainless steel overpack using remote-handling equipment to protect workers. The overpack is then placed in the concrete vertical storage cask.

The five-pack storage system design is based on spent nuclear fuel dry-cask storage systems in use throughout the U.S. and around the world — primarily for temporary storage of fuel at nuclear plants. The system was modified to handle long-term storage of vitrified high-level waste, said officials.

Relocation of the 275 high-level stainless steel containers with solidified radioactive glass from more than 600,000 gallons of radioactive liquid waste at the West Valley site is expected to be concluded in 2018.

Once all the high-level steel containers are removed from the Main Process Building, it can be demolished to gain access to the source of an underground plume of strontium 90 which made its way off the property before being intercepted and treated a few years ago.

The high-level waste casks will remain at the site until a national repository for such radioactive waste is available. The U.S. halted work on the proposed repository in Nevada more than five years ago and does not currently have an alternate site.

Extensive planning, design, construction, building modification and the purchase of special transport equipment was required to transfer a cask holding five canisters from inside the plant to the on-site storage pad. The work is being performed under the Phase I decommissioning contract that was awarded in August 2011.

The vertical storage containers, which are fabricated on-site, include a 4-inch thick steel liner and 20 inches of steel-reinforced concrete to ensure the high-level radioactive waste remains securely contained, officials said.

West Valley Demonstration Project Director Bryan Bower said, “I could not be more proud of this team. This effort is a culmination of four years’ work to begin the safe removal of the high-level waste canisters from the former reprocessing facility, allowing for the eventual demolition of the building.”

Paul Bembia, director for the New York State Energy Research and Development Authority’s West Valley Site Management Program, said “The relocation of the high-level radioactive waste to the new interim storage facility is a significant step forward in the cleanup effort at the West Valley site.”

The West Valley Demonstration Project is located on the Western New York Nuclear Service Center and was once used for commercial reprocessing of spent nuclear fuel.

In 1962, Nuclear Fuel Services constructed the first and only commercial nuclear fuel reprocessing plant in the U.S. in West Valley.

(Contact reporter Rick Miller at [rmiller@oleantimesherald.com](mailto:rmiller@oleantimesherald.com). Follow him on Twitter, @RMillerOTH)