Unanticipated radioactive contamination found during excavation at WVDP

By Rick Miller, Special to The Press | Posted: Friday, September 27, 2013 8:00 am

ASHFORD — Unanticipated radioactive contamination was discovered during excavation for a concrete pad at the West Valley Demonstration Project where large casks containing radioactive, glass logs encased in 10-foot by 2-foot stainless steel canisters and will be stored until a national repository is available.

The level of contamination, found in a fill area at the south end of the site, was not disclosed. Testing of the samples temporarily halted excavation while radiological teams determined the extent of the contamination. Contaminated soil was placed in five modular packs.

The contamination was disclosed by Heatherly Dukes, manager of the high-level waste project for CH2M Hill Babcock & Wilcox West Valley (CHBWV), during a meeting Wednesday night, Sept. 25, of the West Valley Citizen Task Force. The area beneath the concrete storage pad site was excavated to a depth of 12 to 15 feet.

The 144-foot by 110-foot concrete pad will be three feet thick and hold 55 casks, each with five stainless steel canisters with the radioactive glass logs. The pad and casks have a 50-year design life.

The canisters are currently located in the chemical process cell of the Main Process Building, which is slated for decommissioning and demolition. However, the canisters must first be packed in the multi-purpose containers and hauled to the concrete pad, which could take two years, and could begin in 2015 or 2016. The determining factor will be to what level the DOE will require the outside of the canisters to be cleaned. Some radioactive dust has settled on the top of the canisters during their storage.

Dukes also outlined the plan to bring 800 gravel trucks to the West Valley site over the next 10 days to fill in the excavation and compact the gravel to Department of Energy (DOE) specifications. The trucks, more than 70 a day, will enter through the normally locked south gate, empty their load and exit through the construction gate at the northern part of the site.

Next, loads of steel rebar and other supplies will begin to arrive, followed by an estimated 100 concrete trucks — one truck every three to six minutes — in a carefully choreographed operation. Those trucks will also enter via Schoolhouse Road though the south gate. The concrete must be tested for quality control on site.

Bryan Bower, director of the West Valley site for the Department of Energy, said signs are up warning local residents of the large number of trucks that will be going to and from the site in coming weeks.

The contractor and the DOE officials have not yet decided whether the additional excavation costs will be part of the contract or an add-on that the DOE will pay.

One member of the Citizens Task Force, Joseph Pati, said the task force needed to press for a target of \$75 million a year for clean-up at the West Valley site, where in the mid-1960s to early 1970s, a private company, Nuclear Fuel Services, reprocessed spent nuclear fuel rods. The company went out of business in 1975, leaving the site to New York State.

The cleanup of the site started after the West Valley Demonstration project Bill of 1980 was approved with major input from the late Sen. Daniel P. Moynihan and former Rep. Stan Lundine.

This year, it looked like the West Valley clean-up budget would dip to \$50 million, but under quirky sequestration rules, West Valley actually got more, Bower explained. This year's appropriation is about \$66 million. He said to justify an increase to \$75 million would require a push by the Citizen Task Force to convince not only the DOE officials in Washington, but House and Senate committees that hold the purse strings for cleanup sites across the country.

Bower said there were \$20 million a year in "hotel costs" at West Valley, which he described as costs that would be incurred even if all other work stopped.

Bower said he thought the DOE and New York State Energy Research and Development Authority (NYSERDA) officials were making progress in deciding what studies need to be undertaken during the Phase 1 process to be ready for Phase 2 which will determine the extent and methods of cleanup for high-level waste tanks and other issues.

Paul Bembia, who is director of the West Valley office of NYSERDA, agreed, saying the two were "very close to an agreement" for the analytical framework for future studies.