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West Valley officials hope to begin moving canisters soon

By RICK MILLER, Olean Times Herald | Posted: Thursday, September 24, 2015 11:24 am

ASHFORD — West Valley Demonstration Project officials hope to begin moving casks containing highly radioactive waste to temporary storage on an open concrete pad in November or December.

New deputy general manager Scott Anderson of CH2MHill, the contractor for the cleanup being overseen by the U.S. Department of Energy, disclosed the target date Wednesday night during a meeting of the Citizens Task Force on West Valley Nuclear Waste at the Department of Energy offices in Ashford.

The main holdup is a 130-ton door to the “hot” cell where 275 of the 10-foot-tall steel radioactive waste canisters sit in the Main Process Building. The door, installed in the 1960s when the plant was in the business of recovering uranium from spent nuclear fuel rods, is stuck in the closed position.

The steel canisters will be removed from the storage cell, then packed into a five-unit concrete overpack structure with remotely welded steel lids. That overpack unit then fits inside a storage cask.

It will then be hauled from the Main Process Building to a special concrete pad hundreds of yards away with a vertical cask transporter that, when fully loaded, weighs more than 85 tons. Parts of the floor in the building had to be reinforced, as did parts of the haul road.

Engineers are working to find parts for the motor and gearbox that control the 130-ton door to the “hot” cell, Anderson said. They need to open the door to be able to install remote cameras in the room before bringing out any of the radioactive canisters, he said.

A test drive of the system using canisters filled with steel shot to approximate the weight of the real radioactive ones, welding them into the overpack unit, placing it in the concrete storage cask and hauling it to the pad was done over several weeks in August, Anderson said.

The test drive showed engineers several issues that will need to be addressed before the first radioactive canisters are removed later this year.

There are currently 16 storage casks at the West Valley cleanup site. Fifty-six more are on order. The last of the 275 canisters won't be removed until 2017.

The canisters have been in storage since completion of the vitrification process that turned 600,000 gallons of highly radioactive liquid waste into 275 glass logs. The cleanup has cost more than \$2 billion.

The next phase of the cleanup can't start until the Main Process Building is demolished and removed to get at the source of a plume of strontium-90 that starts beneath the plant and extends toward Erdman Brook, which empties into Cattaraugus Creek. A special permeable barrier wall treats the radioactive material before water passes through it.

Paul Bembia, site director for the New York State Energy Research and Development Authority, said results from an aerial radioactive survey conducted by NYSERDA and the Department of Energy have not been finalized. Some off-site property owners would be contacted soon for permission to take soil samples from their land, he noted.

"We're working now to make arrangements with property owners," he said.

The aerial survey by Remote Sensings Lab Co. flew over West Valley and 90 square miles of surrounding area, including the length of Cattaraugus Creek to Lake Erie, Bembia said. He offered no further details.

There were also reports on damage from heavy rain that hit the area July 14, including erosion control structures on Erdman Brook and Frank's Creek, which bisect the site. There was no critical emergency damage, said Bryan Bower, Department of Energy site director.

The spillway on Lake 1 was breached, but not the dam, he said. The repairs on Erdman Brook are nearly complete, and crews plan to move soon to Frank's Creek to shore up temporary erosion control measures.

The area got nearly 4 inches of rain over 24 hours, including 1.8 inches in a half-hour period, which exceeds the 10-year recurrence estimate, officials said.

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