

Main Plant building 'deconstruction' underway at West Valley

• By RICK MILLER Olean Times Herald 9-22-2022



WEST VALLEY — An excavator took the first bite out of the Main Plant Process Building at the West Valley Demonstration Project (WVDP) on Wednesday in a “controlled deconstruction” of the structure over the next 30 months, the U.S. Department of Energy announced Thursday.

Extensive measures are being used to prevent the potential spread of radioactive contamination and safety professionals will provide continuous monitoring and sampling during the deconstruction process, DOC officials said.

An extensive modeling and real-time monitoring system has been established to help ensure that any potential radiological exposure from demolition activities is kept well below regulatory levels.

The five-story, reinforced-concrete building has more than 35,000 square feet and was the heart of the commercial reprocessing of plutonium and uranium from 640 metric tons of spent nuclear fuel from 1966 to 1972, when production stopped.

It is 270 feet long by 130 feet wide and 87 feet tall. Department of Energy officials said the workforce has been at work for the past two decades removing seven miles of radioactive piping and 50 tons of contaminated equipment from the Main Plant Process Building, or MPPB.

The last project on the interior of the building removed the surface of contaminated concrete wall using liquid nitrogen under very high pressure. That was completed in August.

Officials believe more than 98% of the radioactivity in the building has been removed. The MPPB is one of the last remaining major facilities at West Valley, and the successful deconstruction of this facility will further reduce environmental risks and position the site for the next phase in cleanup.

“The safety of the workforce, community, and surrounding environment remain WVDP’s top priority, and all precautions have been taken to ensure MPPB deconstruction activities align with this ever-important priority,” DOE-WVDP MPPB Project Director Stephen Bousquet, said.

The planned approach for taking down the MPPB incorporates best practices and lessons learned from WVDP and across the DOE complex including the use of deliberately planned and sequenced deconstruction, and implementation of robust work controls.

In addition to radiological contamination, the facility also contained hazardous materials, including asbestos insulation, lead and PCBs.

John Rendall, president of CHBWV, said, “Our workforce was deliberate in the planning, deactivation, and execution of this work. Every effort has been made to implement robust work controls to help protect the workforce, the public, and the environment.”

Earlier this month, a group of 25 environmental groups including the Coalition on West Valley Nuclear Wastes opposed the demolition of the building without a cover.

A water misting system is designed to remove dust and any particles from the air. That water will then be collected and analyzed for any contamination. Water will be treated and released into a nearby lagoon if it is safe.

The cleanup at the site has been ongoing since just after passage of the West Valley Demonstration Project Act in 1980. Studies for phase 2 of the cleanup are underway.

SECURITY UPGRADE

While demolition is ongoing at the WVDP, a new guard house for its current and future onsite security needs is being constructed.

The new facility will provide more space for officers with updated offices, modern equipment, badging for site staff and storage space.

“It’s important that we provide our security force with the tools they need to perform their jobs effectively and efficiently,” said Jennifer Dundas, Safety and Site Programs team leader. “This new facility and more modern equipment will help our security force to be better prepared to protect and serve our workforce and the site.”

The current guard house was built in the early 1980s when cleanup at the site first began. It has served its purpose well over the years, but the site has outgrown its current capabilities.

This new facility will better serve the continued needs of the site, as it progresses toward the next phase of the cleanup.

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