Demolition of Former Plutonium Finishing Plant Main Processing Building Complete

RICHLAND, Wash. – The plant that produced two-thirds of the nation’s Cold War-era plutonium no longer exists. After 40 years of operations, and 20 years of cleanout and demolition preparation, crews recently finished demolishing the Plutonium Finishing Plant’s main processing facility at the U.S. Department of Energy’s (DOE) Hanford Site.

“Removal of this iconic building forever changes the landscape at the Hanford Site and highlights a historic accomplishment in DOE’s overall cleanup mission,” said Tom Teynor, project director for PFP demolition at DOE’s Richland Operations Office. “Everyone who contributed to this achievement should be very proud of their efforts.”

The main processing facility was nicknamed “Z-Plant,” because it was the last stop of plutonium production at Hanford. It operated from 1949 to 1989 and contained two processing lines where workers working through gloveboxes would create hockey puck-sized plutonium “buttons” for shipment to weapons-manufacturing facilities. Plutonium production left gloveboxes and other pieces of plutonium processing equipment highly contaminated.

Decades of demolition preparations included decontaminating and removing about 200 pieces of plutonium processing equipment like gloveboxes, 1.5 miles of ventilation piping, contaminated process lines, asbestos and other hazards. In some instances, such as cutting and removing two highly contaminated glove boxes, workers performed some of the most hazardous work anywhere across the DOE complex.

Four main buildings that anchored the plant were torn down since demolition began in 2016, an americium recovery facility (242-Z), fan house/ventilation stack (291-Z), plutonium reclamation facility (236-Z), and lastly the main processing facility (234-5Z).

DOE contractor CH2M HILL Plateau Remediation Company (CHPRC) is responsible for the safe and compliant demolition of PFP.

“This was one of the most challenging risk-reduction efforts in the DOE complex,” said Jason Casper, CHPRC vice president of the PFP closure project. “I could not be more proud of our dedicated workforce in safely completing this monumental task.”

The final activities at PFP include packaging and safe disposal of the rubble from the Plutonium Reclamation Facility, core sampling soil beneath the building pads and stabilization of the site with soil cover. The Plutonium Reclamation Facility was demolished in 2017, and crews will be removing rubble that has been under the cover of fixatives and soil. This work is scheduled to begin next week and completed this summer.

Watch a time-lapse video of the demolition: https://www.youtube.com/watch?v=kdq1CFy_o0

The Department of Energy (DOE) is responsible for the federal government’s cleanup of the legacy of more than 40 years of plutonium production at the Hanford Site near Richland, Wash. The DOE Office of River Protection (ORP) is responsible for the safe and efficient retrieval, treatment and disposal of the 56 million gallons of chemical and radioactive waste stored in Hanford’s 177 underground tanks. The River Protection Project is the largest and most complex environmental remediation project in the nation. ORP oversees the tank waste management mission and the building of the world’s largest radioactive waste treatment plant, which will immobilize the legacy tank waste through vitrification. The DOE Richland Operations Office is responsible for all remaining Hanford cleanup and is currently focused on demolishing the high-hazard Plutonium Finishing Plant, excavating and disposing of contaminated soil and waste, treating contaminated groundwater, moving radioactive sludge out of the K West Basin and away from the Columbia River, and configuring Hanford Site infrastructure for the future, with an emphasis on supporting the tank waste mission. The two offices oversee Hanford Site work that is conducted by a federal and contractor workforce of approximately 9,000 personnel. Visit www.hanford.gov for more information about Hanford Site.