

Tri-Party Agreement Changes for Demolishing Hanford's Plutonium Finishing Plant

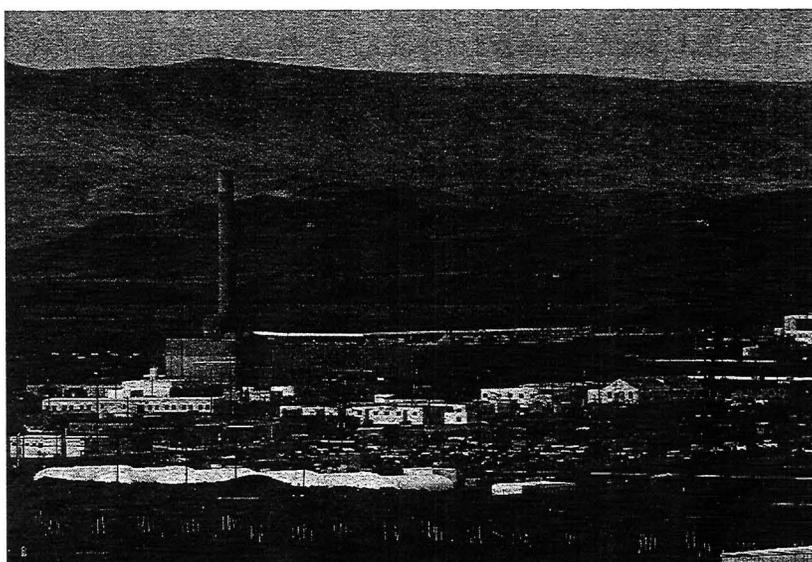
The U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), and the Washington State Department of Ecology (Ecology)- the Tri-Party Agreement (TPA) agencies - have made a change to the cleanup schedule to complete demolition of the Plutonium Finishing Plant which had been scheduled for completion by September 30, 2016. The TPA agencies have signed a change package to extend the milestone date to September 30, 2017. This fact sheet provides information on why this extension was granted.

U.S. Department of Energy • Washington State Department of Ecology • U.S. Environmental Protection Agency

Background

The Hanford Site is located in southeastern Washington state along the Columbia River. This 580-square-mile former plutonium production complex is undergoing cleanup conducted by DOE with regulatory oversight from EPA and Ecology.

Located in the 200 West Area of the Hanford Site, the Plutonium Finishing Plant (PFP), also known as Z-Plant, operated from 1949 to 1989 and represented the final step in plutonium production at Hanford. At this facility, plutonium was processed into solid, hockey-puck sized "buttons" and plutonium oxide powder that could be safely shipped to the country's weapons production facilities. The plant produced nearly two-thirds of the nation's plutonium stockpile.



The Plutonium Finishing Plant complex, located in the 200 West Area of the Hanford Site.

The PFP is among the largest, most complex plutonium facilities in the DOE Environmental Management Complex and the most hazardous facility on the Hanford Site. The PFP cleanup activities are in the final, and most difficult, stages of an approximately 20-year removal project to prepare the facility for safe demolition.

The *Hanford Federal Facility Agreement and Consent Order* (also known as the Tri-Party Agreement or TPA), is a legal agreement between DOE, Ecology and EPA. The TPA identifies cleanup actions and schedules, called milestones. Changes can be made to the TPA with the approval of the three agencies. In 2002, the TPA agencies set a milestone for finishing demolition of the PFP by the end of September 2016. However, the past 14 years have shown that the magnitude of the work needed at the facility and technical, radiological, and aging equipment difficulties were greater than originally thought. For example, equipment broke down more than anticipated, including the remote-operated crane located in the plant's highly radioactive Plutonium Reclamation Facility.

Demolition Approach

Although steady work toward safely and compliantly demolishing the PFP has occurred, DOE recently determined that the goal of completing demolition in September 2016 cannot be achieved. The reasons for this include:

- Workers encountered more hazards than anticipated;
- A change from using multiple crews on high-hazard projects to fewer, more experienced crews was implemented to reduce injuries and help ensure workers could be protected from chemical and radiological exposures.



Workers at the PFP used enhanced personal protective equipment, known as "Level B" suits, during cleanup of highly hazardous areas in the plant

In January 2016, after the change in crew approach, safety has improved at the PFP. Workers are making significant progress toward preparing the facility for demolition, including removing the last of two highly-hazardous glove boxes from the facility, decontaminating a highly-contaminated former processing canyon and preparing chemical tanks for removal during demolition.

The safe and compliant demolition of the plant will remove risks to workers, the public and the environment.

What changes occurred?

TPA Milestone M-083-00A calls for the removal of above-grade structures at the PFP and other activities required to safely and compliantly demolish the facility and transition to a safe and stable surveillance and maintenance mode by September 30, 2016.

The combination of a greater magnitude of hazards than originally thought, along with the need to change work to improve safety, have led DOE, EPA, and Ecology to change the final milestone for completing demolition of the plant from September 30, 2016, to September 30, 2017.

The work to be completed under the milestone remains the same – complete demolition of the PFP.

A copy of the TPA change package documenting the changes has been posted in the Hanford Site Administrative Record at <http://bit.ly/2acBVAO>



In March, after pouring a protective layer of grout on the floor to limit employee exposure to radiation, workers began vacuuming contamination from the Plutonium Reclamation Facility canyon.