THE HANFORD SITE

Plutonium Uranium Extraction Plant

Fact Sheet – June 2021

The Plutonium Uranium Extraction Plant was the fifth and final chemical processing facility built at Hanford.

The U.S. Department of Energy and contractor Central Plateau Cleanup Company are working to reduce the risks of aging facilities across the Hanford Site.

Background

The Plutonium Uranium Extraction Plant (PUREX) was the fifth and final chemical processing facility built at Hanford. The plant operated from 1956 to 1972, and from 1983 to 1988, to reprocess and separate plutonium from fuel rods irradiated in Hanford's reactors.

The facility is located near the center of the Hanford Site in an area known as the Central Plateau. PUREX is approximately 1,000 feet long, 104 feet high (with approximately 40 feet below ground), and 62 feet wide. The main portion of the facility — called the "canyon" because of the large open area inside — is approximately 860 feet long and contains 11 separate areas, or "cells," that housed processing equipment operated remotely by workers due to the high levels of radiation.

Mission

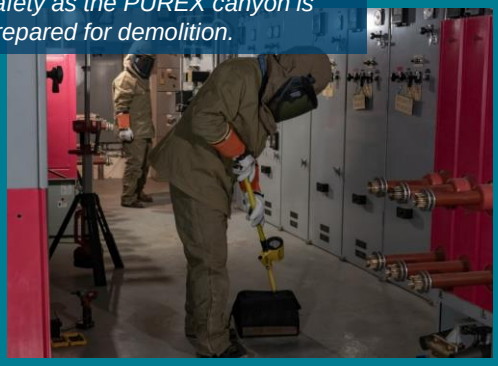
Today PUREX workers are focused on risk-reduction activities to prepare the heavily contaminated facility for demolition. This work includes characterization of radiological and chemical hazards, electrical and mechanical isolation of support facilities and the main canyon facility, asbestos abatement for more than 1,700 feet of old steam lines, and demolition of several support facilities.

Workers also perform regular surveillance and maintenance of the PUREX canyon to keep the facility in a safe condition.

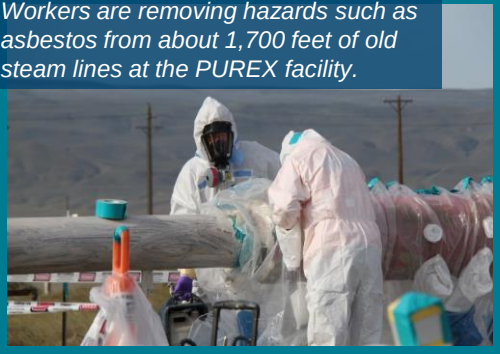
Future

Current activities will allow workers to safely plan for and conduct upgrades to plant infrastructure needed to support future risk-reduction activities, including removal of chemical and production lines and processing equipment called glove boxes prior to demolition of the main facility.

Electrical isolation ensures worker safety as the PUREX canyon is prepared for demolition.



Workers are removing hazards such as asbestos from about 1,700 feet of old steam lines at the PUREX facility.



Aging plant support facilities like these large tanks will be decontaminated and demolished prior to demolition of the main facility.