THE HANFORD SITE

222-S Laboratory Complex

Fact Sheet – January 2024

The 222-S Laboratory complex is located near the center of the Hanford Site in the 200 West Area.

The laboratory has 11 hot cells, which allow crews to remotely handle and analyze radioactive samples.

222-S Laboratory Overview

The 222-S Laboratory is the primary on-site laboratory for analysis of highly radioactive samples in support of all Hanford Site projects.

U.S. Department of Energy contractor Hanford Laboratory Management and Integration has the sole responsibility for operating, managing and maintaining the lab. Analyses are performed on a wide variety of air, liquid, soil, sludge and biological samples.

The laboratory studies the physical and chemical characteristics of waste to support retrieving waste from Hanford's large underground tanks, provides data to support tank closure requirements, and supports the Vadose Zone Program, which tests for potential threats to groundwater.

The contractor is supporting Hanford's Direct-Feed Low-Activity Waste (DFLAW) Program, which will treat tank waste by immobilizing it in glass for safe disposal. During 24/7 DFLAW treatment operations, laboratory staff will characterize tank waste to ensure it is suitable to be treated at the Site's Waste Treatment and Immobilization Plant.

222-S Laboratory Quick Facts

History: Operations began in 1951 to support producing plutonium for the nation's defense.

Facility: The laboratory is a 70,000-square-foot facility with several support buildings.

Equipment: The laboratory contains more than 100 pieces of analytical equipment, 156 fume hoods, 46 remote manipulators to perform work, and 11 hot cells.