

Environmental Monitoring

The environmental impacts of Hanford operations have been monitored since the 1940s. Today, federal, state and local governments routinely monitor the air and water in and around the Hanford Site. Elaborate procedures and barriers keep legacy contamination from past Hanford operations isolated from workers and the public. Contaminated areas are accessible only to highly trained workers.

Wildlife at Hanford, including deer and elk, is periodically monitored and the results compare favorably with those from wildlife monitored elsewhere in the Northwest. Fish populations in the Hanford Reach of the Columbia River are also monitored. This stretch of the Columbia, due to its isolation and the lack of development along its shores, remains the healthiest part of the river. Today it is the largest natural hatchery of Chinook salmon in the continental United States.

Environmental monitoring extends far beyond the boundaries of the Hanford Site. Eastern Washington air and water quality is regularly monitored and found to meet or be well below strict federal standards.

Scientists also evaluate potential radiological doses to the public resulting from exposure to Hanford Site liquid and airborne effluents. This evaluation

continues to show that the potential radiation dose to the public is well below that received from other natural and man-made sources.



Other Sources

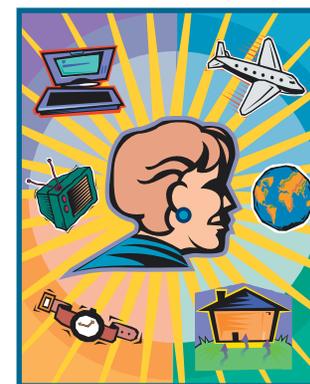
Benton-Franklin Health Department www.bfhd.wa.gov
Dr. Larry Jecha, Health Officer 509-943-2614
City of Richland www.ci.richland.wa.us/ups/upspage.html

Washington State Department of Health
www.doh.wa.gov
Pacific Northwest National Laboratory www.pnl.gov

Living With Hanford

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Monitoring Environmental Quality



The Tri-Cities of Richland, Kennewick, and Pasco are located near Hanford, the Department of Energy's former plutonium production site, in southeastern Washington State. Questions often arise about the quality of the region's air and water.

The region's air and water quality is regularly monitored and meets strict federal standards under the Clean Water Act and Clean Air Act.

Potential radiation risks to the public from the Hanford site are also monitored. This pamphlet describes the results of that monitoring.

History

The Tri-Cities sit at the confluence of the Columbia, Snake and Yakima Rivers in the desert of southeastern Washington State. Today, the area is a hub for business and transportation and the center of the Pacific Northwest's agriculture industry. But that wasn't the case 50 years ago.



In the early 1940s the Tri-Cities area was home to a few scattered towns and villages surrounded by small family farms and ranches. Then, in the midst of World War II, the U.S. Army chose the area as the home for a top-secret installation.

The Hanford Site produced the key ingredient in nuclear weapons: plutonium. Hanford plutonium was used in the bomb that destroyed Nagasaki and brought World War II to an end. Hanford continued to play a pivotal defense role throughout the Cold War - hosting plutonium production for the nation's nuclear arsenal.

While the site encompasses 560 square miles of sagebrush-covered hills, only about 10 percent of the site was devoted to plutonium production, with the remaining 500 square miles serving as a buffer zone for security reasons. This buffer zone, including a 51-mile stretch of the Columbia River known as the Hanford Reach, has remained isolated and undeveloped.

Hanford Cleanup Begins

In 1989 Cold War operations ended at Hanford. The U.S. Department of Energy, the Environmental Protection Agency and the State of Washington signed the Tri-Party Agreement to bring Hanford into compliance with state and federal environmental laws. This landmark agreement kicked off an unprecedented environmental cleanup effort.

Most of the cleanup work is concentrated on Hanford's central plateau, about 30 miles north of Richland. The biggest job is disposing of the contents of 177 underground tanks that hold 53 million gallons of liquid radioactive and chemical wastes.

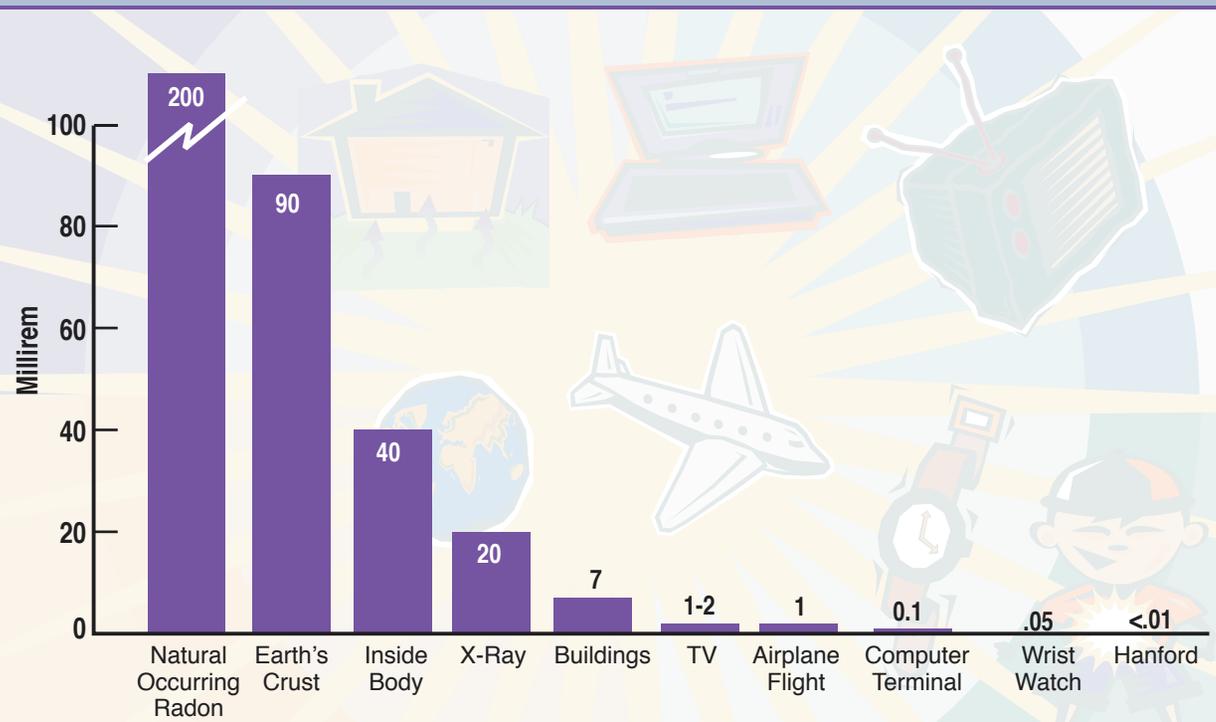
Bechtel National, Inc. and its principal subcontractor, Washington Group International, is building a huge complex of waste treatment plants to immobilize these wastes into a stable glass. The project is expected to take 10 years and cost \$4 billion.



Underground waste tanks under construction.

Potential Radiation Dose To Public from Hanford Compared With Other Sources

(national average dose from all background sources: approximately 300 millirem)



Sources: National Council on Radiation Protection and the U.S. Environmental Protection Agency (EPA)