

## U.S. DEPARTMENT OF ENERGY AND

# THE MANHATTAN PROJECT

The U.S. Department of Energy's Office of Environmental Management's (EM) mission is to address the environmental legacy resulting from decades of nuclear weapons production and government-sponsored nuclear energy research, including at many sites involved in the once-secret Manhattan Project.

## HANFORD

Created as part of the Manhattan Project, the B Reactor at DOE's Hanford Site in Washington state was constructed in 1943 and produced plutonium used in the Trinity Test, as well as for the atomic bomb dropped on Nagasaki, Japan, to end World War II. With its mission thought complete, the B Reactor was then shut down in 1946. However amidst tension between the Soviet Union and the United States in the late 1940s, it was restarted in 1948 to support production of plutonium for the Cold War until 1967.

The B Reactor Museum Association (BRMA), a local non-profit organization that includes many former employees, worked since 1991 to advocate for the B Reactor to be preserved and opened to the public. Since 2008, when the B Reactor was named a National Historic Landmark, DOE has worked to make the facility accessible via escorted tours for people



of all ages, abilities, and nationalities. Now one of five Hanford facilities in the Manhattan Project National Historical Park, B Reactor has had visitors from all 50 states and more than 90 countries worldwide. The reactor tours are an opportunity for the public to learn more about the Manhattan Project, the plutonium production process and legacy wastes, and how DOE is successfully cleaning up the site today.

H.E.W. - Atomic Bomb Plant - Process Bldg.  
Photo by Robley L. Johnson

## LOS ALAMOS NATIONAL LABORATORY

Los Alamos National Laboratory (LANL), located in Los Alamos, New Mexico, was established in 1943 as Site Y of the Manhattan Project for a single purpose: to design and build an atomic bomb. It took just 20 months to detonate the world's first atomic bomb 200 miles south of Los Alamos at the Trinity Site on the Alamogordo bombing range.

EM Los Alamos Field Office, established in 2015, investigates hazardous chemical and radioactive materials contamination as a result of past LANL operations and remediates sites where such materials are found above acceptable regulatory levels. This is known as the legacy cleanup mission.



## OAK RIDGE OFFICE OF ENVIRONMENTAL MANAGEMENT

During the 20 years the Graphite Reactor operated—from 1943 to 1963—Oak Ridge played an instrumental role in the Manhattan Project and U.S. history overall. The Graphite Reactor once produced the world's first few grams of plutonium, created the first sparks of nuclear-generated electricity and went on to serve as one of the most prestigious nuclear research facilities in the world. Today, the Graphite Reactor serves as one of the Manhattan Project National Historic Park's most popular attractions, bringing in thousands of visitors every year thanks to its historical and educational offerings.

Also constructed as part of the Manhattan Project, the K-25 building produced uranium for the world's first nuclear weapons. The K-25 plant continued to grow its enrichment missions after the war and employed 12,000 workers at its peak.

Today, the K-25 site, now known as the East Tennessee Technology Park, has been transformed by DOE's EM program.



More than 500 facilities have been demolished and much of the land has been transferred to the community for economic development, conservation, and historic preservation. Earlier this year, EM opened the K-25 History Center, built adjacent to the K-25 building footprint, to honor and preserve the stories of those workers who operated the complex during World War II and the Cold War.

## LEGACY MANAGEMENT

The Office of Legacy Management (LM) is the caretaker of legacy sites that played a critical role in America's nuclear history, including the Manhattan Project. LM ensures the continuing protection of human health and environment at 100 sites in 30 states and territories, ranging from Puerto Rico to Alaska.

EM transferred long-term stewardship responsibility to LM for 25 sites that had been directly involved in the Manhattan Project. The sites include former uranium mills, a former reactor site, and machine shops that fashioned reactor fuel for Oak Ridge and Hanford.

LM also inherited the Formerly Utilized Sites Remedial Action Program (FUSRAP) program from EM. Since the 1970s, FUSRAP personnel have reviewed the radiological conditions at more than 600 sites that were potentially involved in early atomic weapons and energy activities. Initially, 46 sites were identified for cleanup. LM currently manages long-term surveillance and maintenance for 34 sites under FUSRAP.



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