



CALIFORNIA

SACRAMENTO

● BURRIS PARK

Burriss Park, California | Site

AN MED/AEC LEGACY SITE

This fact sheet provides information about the **Burriss Park site**. This privately owned site is managed by the **U.S. Department of Energy Office of Legacy Management** as a **Manhattan Engineer District/Atomic Energy Commission Legacy Site**.

Site Information and History

The Burriss Park, California, Site, formerly the Burriss Park Field Station, is privately owned and located at 6500 Clinton Avenue in Kingsburg, California. Kingsburg is a rural agricultural community in the San Joaquin Valley, south of Fresno. The Burriss Park site is part of a 57-acre county park owned and maintained by Kings County Parks and Grounds Department. The U.S. Department of Energy (DOE) has responsibilities for a small portion of the site, which consists of a 50-foot by 50-foot fenced area enclosing a 42-foot by 42-foot reinforced concrete pad.

In 1956, the U.S. Atomic Energy Commission (AEC) contracted the University of California, Berkeley (UC Berkeley) to establish a strontium-90 (Sr-90) research project within Burriss Park. The site consisted of 49, 6-foot by 6-foot soil plots laid out in a square grid and separated by concrete barriers extending 30 inches into the soil and 6 inches above the ground. Three experiments were conducted to test the effectiveness of removing the radioactive strontium isotope from soil. In the first test, Sr-90 was added to the soil, and water containing electrolytes (salts and acids) was applied evenly to the soil to leach the strontium and allow it to percolate deeper into the ground. The second experiment involved using asphalt solutions to immobilize the strontium in the upper layer of soil, and then

remove the contaminated asphalt. In the third test, Sr-90 was placed in bands at depths ranging from 2 inches to 4 feet to measure the rate of root development in the bands under different watering conditions. These studies were published in the university's journal of agricultural science, *Hilgardia*, in 1959.

UC Berkeley decommissioned the site in 1963, under the same AEC contract by filling the plots with sand and gravel, placing a 6 millimeter polyethylene liner over them, and constructing a 4-inch metal-mesh reinforced concrete pad over the entire gridded area. A bronze plaque identifying the 72 millicuries total activity of Sr-90 and the UC Berkeley contract was imbedded in the northeast corner of the pad. A permanent fence was constructed around the site and signs containing the same information were posted on each side of the fence.

The remedial activities conducted by UC Berkeley in 1963 require no further actions. Multiple radiological surveys have been conducted over the last 53 years and concentrations of Sr-90 in accessible areas outside of the containment structure have been at background levels. The California Environmental Protection Agency, Kings County, and UC Berkeley officials agree that the site does not pose an unacceptable risk to the public in its existing configuration.

Regulatory Setting

DOE has legislative authority under the Atomic Energy Act (AEA) of 1954, as amended, to perform radiological surveys, monitoring, and maintenance at sites used to support the nuclear activities of DOE's predecessor agencies. DOE also has legislative authority under AEA to remediate sites identified as requiring some form of response action.

The U.S. Atomic Energy Commission (AEC), predecessor agency to DOE, established the Formerly Utilized Sites Remediation Program (FUSRAP) in March 1974 to evaluate radioactive contamination at sites where work helped develop the nation's nuclear weapons and atomic energy programs.

DOE determined that Burriss Park was ineligible for cleanup under FUSRAP in 1987 because adequate remediation activities had been performed by the UC Berkeley. DOE Office of Legacy Management (LM) confirmed this decision in the Elimination Report and Determination of LTS&M Authority for the Burriss Park Field Station, Kings County, California (June 2014). However, since the site was an Sr-90 research project initiated in 1956 supporting the AEC, LM accepted maintenance-only responsibility for the remaining Sr-90 material contained in the 50-square-foot area at the former Burriss Park Field Station on November 26, 2014.

Legacy Management Activities

In September 2015, LM successfully completed site maintenance, including removal of fallen tree debris and fence repairs, and developed a site-specific long-term surveillance and maintenance plan. Under this plan, LM will maintain protective measures, including access agreements, fencing and signs, preserve legacy records, and respond to stakeholder inquiries. LM will also maintain the site's physical condition, perform regular inspections, and periodically conduct radiological surveys to ensure the enclosure protects human health and the environment. LM, site regulators, and stakeholders conducted the first site inspection in December 2016. LM conducted site inspections yearly through 2019, then changed the inspection frequency to every five years. The next site inspection is scheduled to occur in 2029.

Contact Information

In case of an emergency at the site, contact 911.

LM toll-free emergency hotline: **(877) 695-5322**

Site-specific documents related to the Burriss Park, California, Site are available on the LM website at www.energy.gov/lm/burriss-park-california-site.

To access the Burriss Park groundwater monitoring data set, please visit <https://gems.lm.doe.gov/>.

For more information about LM activities at the Burriss Park, California, Site, contact:

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