U.S. DEPARTMENT OF ENERGY | Legacy Management

Fact Sheet

FUSRAP

Burris Park, California, Site

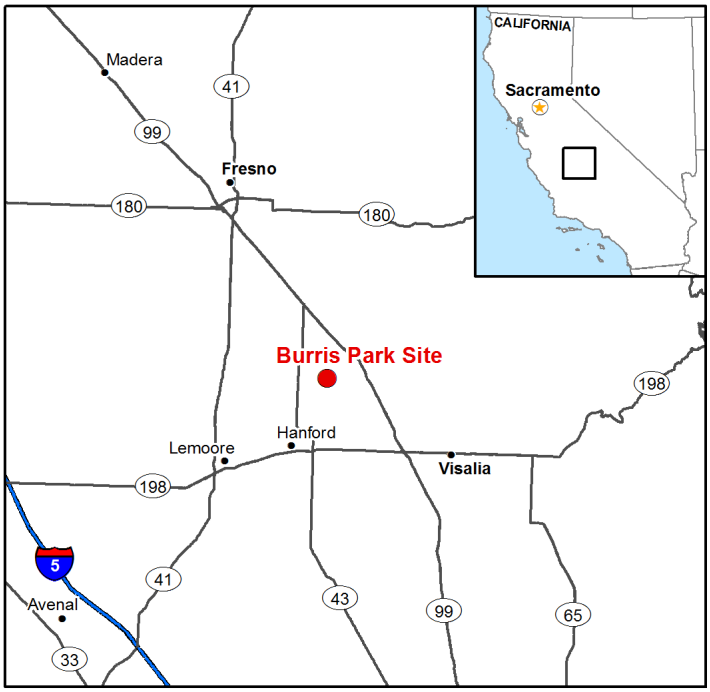
This fact sheet provides information about the Burris Park, California, Site. This site is managed by the U.S. Department of Energy Office of Legacy Management as an Other Site under the Formerly Utilized Sites Remedial Action Program.

Site Description and History

The Burris Park, California, Site, formerly the Burris Park Field Station, is located at 6500 Clinton Avenue, Kingsburg, California. Kingsburg is a rural agricultural community in the San Joaquin Valley, south of Fresno. The Burris Park site is part of a 57-acre county park owned and maintained by Kings County Parks and Grounds Department. The site 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 Burris 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



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Location of the Burris Park, California, Site

the 72 millicuries total activity of Sr-90 and the UC Berkeley contact 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

AEC, a predecessor agency to the U.S. Department of Energy (DOE), established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to evaluate and remediate radioactive contamination at sites where work was conducted to develop the nation's nuclear weapons and early atomic energy program. Congress transferred responsibility for FUSRAP site characterization and remediation to the U.S. Army Corps of Engineers in 1997. DOE retained responsibility for FUSRAP eligibility determinations and for long-term surveillance and maintenance of remediated FUSRAP sites.

Burris Park was determined to be ineligible for FUSRAP inclusion in 1987, as documented on DOE's Office of Legacy Management (LM) website at http://www.lm.doe.gov/Considered_Sites/Burris_Park_Field_Station_-_CA_10/; and the site ineligibility was reaffirmed in 2014, as documented in the *Elimination Report and Determination of LTS&M Authority for the Burris Park Field Station, Kings County, California* (June 2014). However, since the site was a Sr-90 research project initiated in 1956 supporting the AEC, LM accepted maintenance only responsibility for the remaining Sr-90 material at the former Burris Park Field Station on November 26, 2014.

Legacy Management Activities

In September 2015, LM successfully completed the required site maintenance and developed a site-specific Long-Term Surveillance and Maintenance Plan. This plan establishes how LM will maintain the protective measures, including access agreements, fencing and signs; perform inspections and upkeep of the physical condition of the site; periodically conduct radiological surveys to confirm the integrity of the enclosure toward human health and the environment protectiveness; preserve historical records to retain site knowledge; and respond to stakeholders inquiries.

Burris Park site during site maintenance activities

Contacts

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

Documents related to the Burris Park site are available on the LM website at http://www.lm.doe.gov/BurrisPark/Sites.aspx.

For other information on site history or current long-term stewardship activities, please contact us at:

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