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● CHUPADERA MESA

NEW MEXICO

Chupadera Mesa, New Mexico | Site

A FUSRAP SITE

This fact sheet provides information about the **Chupadera Mesa site**. Long-term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office of Legacy Management** under the **Formerly Utilized Sites Remedial Action Program**.

Site Information and History

The Chupadera Mesa, New Mexico, Site is located approximately 28 miles northeast of the Trinity atomic bomb test site at the White Sands Missile Range (also referred to as Area 21). The area consists of open range and is used primarily for cattle grazing. The Trinity test took place approximately 60 miles north of Alamogordo, New Mexico.

The nation's first atomic bomb test was conducted at the Trinity test site on July 16, 1945, as part of the Manhattan Project, which conducted research for the development and production of nuclear weapons during World War II. Windblown fallout from the Trinity test drifted northeast over the White Sands Missile Range, Chupadera Mesa, and other ranching areas. Radiation measurements began the same day as the test, and since then, surveys and studies have been performed in the area by the University of California (in 1948, 1950, and 1951), the U.S. Environmental Protection Agency (in 1973 and 1974), and the Los Alamos National Laboratory (from 1972 to 1979).

The Chupadera Mesa site was one of six regions of study and sampling (along with the Trinity area, White Sands Missile Range, Bingham area, Far Fallout area, and San

Antonio area) to evaluate the presence of residual radioactive contamination. Radioactive decay since the Trinity test has resulted in substantial reductions of fallout levels at the Chupadera Mesa site and has left only longer-lived radioactive materials, including cesium-137, strontium-90, and plutonium-239 (with traces of europium-155). However, based on these extensive studies and sampling data, the U.S. Department of Energy (DOE) determined that the dose from the residual radioactive contamination for an individual living in the fallout area and consuming food produced there was less than the U.S. Nuclear Regulatory Commission (NRC) criterion of 25 millirem per year for unrestricted use. Therefore, DOE concluded that no remedial action was needed at the site.

Regulatory Setting

The U.S. Atomic Energy Commission (AEC), the predecessor agency to DOE, established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in March 1974 to evaluate radioactive contamination at sites used in the development of the nation's nuclear weapons and atomic energy programs. DOE has the legislative authority under the Atomic Energy Act (AEA) of 1954, as amended, to perform radiological surveys, monitoring, and maintenance at sites that supported the nuclear

activities of DOE's predecessor agencies. DOE also has legislative authority under the AEA to remediate FUSRAP sites identified as needing some form of response action. In 1997, Congress transferred responsibility for FUSRAP site characterization and remediation from DOE to the U.S. Army Corps of Engineers. The DOE Office of Legacy Management (LM) retains responsibility for long-term care of remediated FUSRAP sites. For more information about the program, please see the [FUSRAP fact sheet](#).

The Chupadera Mesa site was evaluated and the total estimated maximum dose for a subsistence farmer was less than 15 millirems per year. (The subsistence farming land use scenario is the most restrictive because it assumes that humans living on the property will consume food that is produced on the property.) The current DOE protective dose limit is 100 millirems per year. Therefore, no remedial action was necessary. A notice of cleanup certification for the site was documented via an April 22, 1986, letter from the DOE Division of Facility and Site Decommissioning Projects Office of Nuclear Energy to the Environmental Safety and Health Division of the DOE Albuquerque Operations Office.

In 2004, DOE transferred long-term stewardship responsibilities for the Chupadera Mesa FUSRAP site from the DOE Office of Environmental Management to LM.

Current Site Conditions

Radiological survey data indicate that the radiological condition of the Chupadera Mesa site is in compliance with applicable DOE standards and guidelines for cleanup of residual radioactive contamination. A release survey and evaluation was conducted by the Los Alamos National Laboratory. The evaluation indicated that the incremental dose of 13 millirems per year for a hypothetical individual using the area as a residence is below the 25 millirems per year criterion for unrestricted use and well below the 150 millirems per year estimate for background in the area. Therefore, DOE released the site for unrestricted use.

Legacy Management Activities

No monitoring, maintenance, or site inspections are required for the Chupadera Mesa site. LM's responsibilities consist of managing site records and responding to stakeholder inquiries.

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 **Chupadera Mesa, New Mexico, Site** are available on the LM website at www.energy.gov/lm/chupadera-mesa-new-mexico-site.

For more information on FUSRAP site history or current long-term stewardship activities, contact:

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