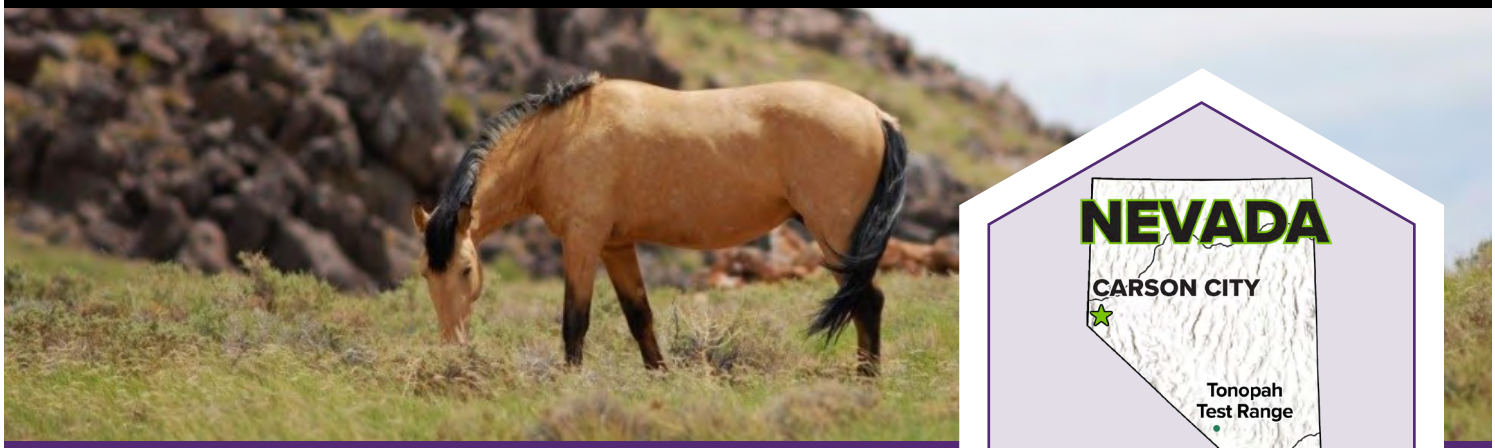
Fact Sheet

U.S. DEPARTMENT OF ENERGY | Legacy Management



Tonopah Test Range, Nevada, Site

A Nevada Offsite

This fact sheet provides information about the **Tonopah Test Range, Nevada, Site (TTR)**. Long-Term stewardship responsibilities for this site are managed by the **U.S. Department of Energy Office of Legacy Management**.

Site Information and History

The Tonopah Test Range (TTR) is located about 160 miles northwest of Las Vegas, Nevada. The range encompasses 280 square miles within the boundaries of the Nevada Test and Training Range (NTTR), which is managed by the U.S. Air Force (USAF). The U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) conducts operations at TTR in support of DOE weapons programs. The range also offers a unique test environment for use by other U.S. government agencies and their contractors.

Although the NTTR spans three counties in Nevada, TTR is located entirely within Nye County, Nevada. Sparsely populated public lands are located north of the TTR boundary and are jointly administered by the U.S. Bureau of Land Management (BLM) and the U.S. Forest Service. These lands are used primarily for cattle grazing and recreation. TTR and NTTR are active training sites that are not open to the public.

TTR was established in 1957 as an isolated location for the U.S. Atomic Energy Commission (AEC) to test ballistics and nonnuclear features of atomic weapons. Testing activities required numerous support facilities for personnel and equipment associated with the tests. In many cases, the use of the support facilities, the tests themselves, and the disposal practices at the time resulted in radiological and chemical contamination of surface and subsurface soils. Although some sites were contaminated as a direct result of testing activities, most of the sites were associated with support activities. These included construction waste landfills, waste trenches, debris piles, fuel storage areas, and septic systems. The DOE Office of Legacy Management (LM) is responsible for long term-surveillance and maintenance (LTS&M) at 40 Corrective Action Units (CAUs) where AEC activities resulted in contamination.

Land Use

The TTR CAUs are located on land owned by BLM and managed by USAF. This land is **not** managed by LM. NNSA is a tenant on portions of the land and is responsible for TTR operations, which is an active test range. However, the land is not part of the DOE/NNSA Nevada National Security Site. Current land use at the TTR is not expected to change.

Monitoring Program

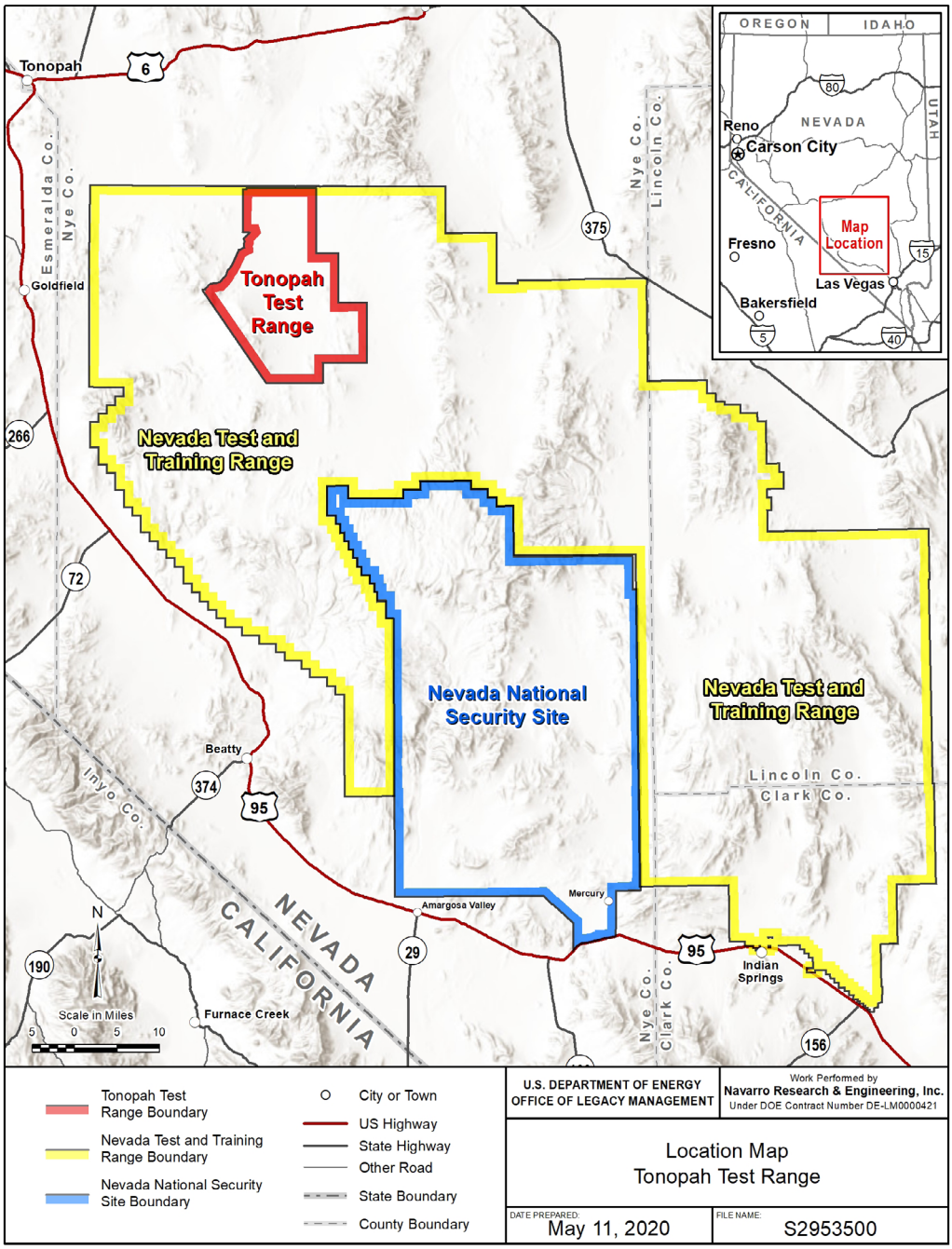
The TTR includes 40 CAUs located on TTR and NTTR. Each CAU contains one or more Corrective Action Site (CAS). Only 10 CASs have post-closure monitoring requirements, including annual visual inspections of fences, signs, monuments, and soil covers.

The majority of the TTR CAUs have no post-closure monitoring requirements and do not have use restrictions (URs). These sites are considered Category 1 sites, as defined in the LM *Site Management Guide* (LM, 2019). Activities associated with Category 1 sites are typically limited to records management and stakeholder support, sometimes referred to as “records-only” sites. It should be noted that two TTR CAUs — CAU 426, Cactus Spring Waste Trenches (CAS RG-08-001-RGCS); and CAU 404, Roller Coaster Lagoons and Trench (CAS TA-03-001-TARC) — are unique among the TTR Category 1 sites. CAU 426 has a UR and CAU 404 has an Administrative UR, but neither site has a requirement for post-closure monitoring. Because they do not require post-closure monitoring, these sites are still considered Category 1 sites.

Post-Closure Monitoring

CAUs that require post-closure monitoring are considered Category 2 sites and are described below. LTS&M activities at Category 2 sites include annual inspections to verify the integrity of engineered or institutional controls, maintenance, records-related activities, and stakeholder support.

- CAU 407, Roller Coaster RadSafe Area: This location was used in 1963 as a decontamination area to remove radiological contamination from vehicles, equipment, and personnel involved in AEC tests. Closure of the surface included removal of radiologically contaminated surface soil. An area identified as a waste disposal pit was closed in place with a soil cover. This CAU is surrounded by a fence.
- CAU 424, Area 3 Landfill Complexes: The seven CASs in CAU 424 consist of one or more buried waste cells that received wastes from daily operations at test support areas from before 1963 to approximately 1993. Wastes include petroleum-contaminated sludge and landfill debris (e.g., drums, carpeting, magnetic recording tape, electronic cable, and scrap metal). Each landfill was closed in place with a soil cover.



- CAU 453, Area 9 Unexploded Ordnance (UXO) Landfill: These waste cells were operated from the early 1960s through 1993 and received wastes from range cleanups that were performed after weapons testing. Cell contents were not well documented during early landfill operations, but site process knowledge indicates the cells were used for solid waste disposal, including disposal of UXO. The waste cells were closed in place with a soil cover. This CAU is surrounded by a fence.
- CAU 487, Thunderwell Sites: These sites include debris from a series of explosives tests conducted in the early to mid-1960s. These sites are use-restricted due to the presence of surface and subsurface debris. However, there are no hazardous materials associated with the sites.

Institutional Controls

Institutional controls (ICs) are administrative and legal instruments used to restrict human and environmental exposure to residual contamination at post-closure sites. At the TTR sites, ICs include the congressional land withdrawal, Federal Facility Agreement and Consent Order (FFACO) URs, and physical features such as warning signs and monuments.

Category 2 TTR CAUs require LTS&M due to residual contamination. The LTS&M activities entail continued monitoring and maintenance to ensure ICs are sufficient to isolate the contamination from potential land users.

Regulatory Setting

TTR is regulated by the Nevada Division of Environmental Protection (NDEP) through the FFACO. The FFACO was signed in 1996 by NDEP, DOE NNSA Nevada Field Office, and the U.S. Department of Defense. LM became a signatory to the FFACO in 2006 when the Nevada Offsites transferred to LM.

Most of the TTR CAUs were closed in the early 1990s. They were either identified as no further action sites (no contamination was present), were closed in accordance with state regulations (landfills and septic systems), or were cleaned up to standards approved by NDEP. LM is responsible for compliance with FFACO requirements and long-term stewardship at the TTR CAUs.

Legacy Management Activities

LM conducts long-term monitoring of the TTR CAUs to ensure conditions continue to be protective of human health and the environment. These monitoring activities are conducted in accordance with site-specific FFACO closure requirements. Monitoring results are summarized in an annual post-closure monitoring report. LM performs LTS&M activities in coordination with USAF, NNSA, and other organizations that utilize the TTR for testing operations.

CONTACT INFORMATION

Site-specific documents related to the **Tonopah Test Range, Nevada, Site** are available on the LM website at **www.energy.gov/lm/tonopah-test-range-nevada-site**

For more information about LM activities at the **Tonopah Test Range, Nevada, Site**, contact:

U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

Email:
public.affairs@lm.doe.gov

DOE Office of Legacy Management
(970) 248-6070 (monitored continuously)
(877) 695-5322 (toll-free)

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