

Soils Sub-Project ... an Approach to Cleanup

safety ❖ performance ❖ cleanup ❖ closure

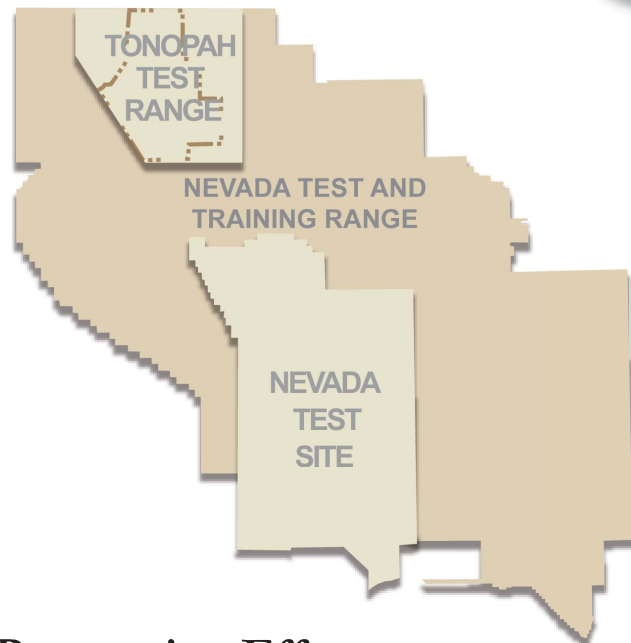


Background

As part of the U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office Environmental Management Program, an intensive restoration effort was launched in 1989 to address the environmental liabilities associated with more than 40 years of nuclear weapons testing. The Soils Sub-Project is part of this effort and its purpose is to manage and, where necessary, clean up surface and shallow subsurface soils. These soils may contain various contaminants including radioactive materials, oils, solvents, gasoline, heavy metals, and lead, as well as contaminated instruments and test structures used during testing activities.

The Nevada Test Site and the Nevada Test and Training Range (formerly the Nellis Air Force Range) played important roles in the advancement of the nation's nuclear testing program. From 1951 through 1992, the sites were used by the U.S. Department of Energy (formerly the Atomic Energy Commission) and the U.S. Department of Defense to conduct atmospheric and underground nuclear weapons tests and chemical explosion tests of plutonium-bearing materials. In addition, safety experiments and storage-transportation tests were conducted to evaluate the safety of nuclear weapons in accident scenarios.

The Nevada Test Site is located 65 miles northwest of Las Vegas. The Nevada Test and Training Range (including the Tonopah Test Range) surrounds the east, north, and west boundaries of the Nevada Test Site.



Restoration Efforts

All of the sites under the Soils Sub-Project require some form of corrective action, ranging from removal of soil to closure in place with restricted access controls. These sites are designated as Corrective Action Sites. Prior to selecting corrective action strategies, the Nevada Site Office performs characterization activities at each site to establish the nature and extent of contamination, and determine potential risk to the public and environment. Corrective actions performed must comply with guidelines and requirements set forth by the Federal Facilities Agreement and Consent Order (FFACO).



Definitions

Closure in Place: Occurs when contaminants of concern (i.e. radioactive materials or hazardous constituents) or associated contamination are enclosed and remain in place at the site. This method is used when exposing and moving the contaminants has the potential for greater safety risks than enclosing and leaving the materials in place.

Corrective Action Site: A site that has been identified as potentially needing remediation.

Waste Characterization: The process of identifying the components of hazardous or radioactive waste.

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Ongoing Efforts

There are a total of 108 Soils Sub-Project Corrective Action Sites. Preliminary characterization activities have taken place at each of these locations. Two sites on the Nevada Test and Training Range have been remediated, and fifteen sites on the Nevada Test Site are expected to be closed in 2008. For the remaining Nevada Test and Training Range sites, negotiation with the State of Nevada and/or the U.S. Department of Defense is needed regarding the specific methods used to address the sites, due to the complexity of the sites and the nature of the contaminants. Corrective Action Sites on the Nevada Test Site will continue to undergo further characterization, and will be cleaned, fenced, posted, and/or monitored as deemed necessary. For sites where contamination is left in place (through closure in place), use restrictions will be maintained. These sites will continue to be managed by the Nevada Site Office according to all applicable requirements. The anticipated date for the Soils Sub-Project closure is 2022.



Characterization activities are completed to establish the nature and extent of contamination at the Nevada Test Site.



Clean Slate I soils shipment packaged in a soft-sided bulk waste container and disposed at the Area 3 Radioactive Waste Management Site.

For more information, please contact:

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