

# *INEEL's Long-Term Stewardship Program*



## Definitions

**Long-Term Stewardship (LTS)** - Activities necessary to ensure the protection of human health and the environment following completion of cleanup or stabilization of a site or a portion of a site. The purpose of the INEEL LTS Program is to ensure the safe and informed use of INEEL facilities and land.

**Groundwater** - Water that soaks into the ground and percolates downward through rock or soil pores until an impermeable layer stops it. Natural sources are rainfall, snowmelt, and water that seeps into the ground beneath streams, rivers and lakes. Other sources can include irrigated fields, canals, wastewater drain fields, injection wells, leaking pipes and industrial cooling ponds.

**Institutional Controls** - Generally includes all restrictions on activities or on access or exposure to land, groundwater, surface water and other areas or media. Some common examples of tools to implement institutional controls include restrictions on use or access, zoning and public advisories.

**Five-year Review** - Periodic reviews of the protectiveness of cleanup activities that are mandated by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The review is required at any site where the remedial action leaves hazardous substances on site.

## History

Because of its remoteness and distance from any major population base, 890 square miles of desert in eastern Idaho has been used by federal agencies to conduct various conventional weapons testing and nuclear research dating back to the 1940s. After World War II, the U.S. Navy and other military branches conducted ordnance testing, aerial bomb tests, and naval artillery testing at an area of the desert designated as the Naval Proving Grounds. In 1949, the

Atomic Energy Commission, a predecessor to the U.S. Department of Energy, created the National Reactor Testing station, which is now known as the INEEL. The primary mission at the time was to design, construct and test nuclear reactors for the purpose of generating electricity to power naval vessels and to conduct nuclear materials testing. More than 50 reactors have been built and tested in the past 50 years.



*Nuclear airplane engine*

During the past five decades, these activities created waste by-products that were disposed at the INEEL using common techniques of the time, such as shallow burial, injection wells and unlined wastewater disposal ponds. Waste generated at a DOE facility in Colorado was disposed of at the INEEL. Hazardous and radioactive contaminants were also introduced into the environment from accidental spills, leaks and discharges.

The Environmental Restoration Program was established in 1989 to identify, assess and clean up contaminated areas that pose an unacceptable risk to people or the



*Historic method of barrel disposal*

environment. Since that time, the INEEL has removed thousands of unexploded ordnance devices, excavated and disposed of thousands of cubic yards of contaminated soil and debris, treated thousands of gallons of water, and placed protective covers over contaminated areas.



*Unexploded ordnance*

## Why Long-Term Stewardship ?

In 1989, the INEEL was added to the U.S. Environmental Protection Agency's Superfund National Priorities List, which requires investigation of all contaminated sites and cleanup of these sites, as necessary.

As cleanup projects are completed, there is a requirement to continue maintenance and monitoring to avoid any activity that could reduce the protectiveness of current barriers. The Long-Term Stewardship Program will ensure that clean-up remedies and institutional controls continue to protect people and the environment long after the INEEL has completed its cleanup mission. The LTS program will sustain information about what hazards remain, so that DOE can make informed decisions when considering future missions at the site. DOE will make sure the communities around the site have information about the risks remaining, and will continue to communicate with those communities while planning and doing stewardship activities.



*Soil and vegetation monitoring*

### Which documents contain information about Long-Term Stewardship?

#### *Department of Energy Long-Term Stewardship*

- A Report to Congress on Long-Term Stewardship, DOE/EM-0563, January 2001  
<http://lts.apps.em.doe.gov/center/ndaareport.html>
- Long-Term Stewardship Study, DOE-EM-0605, October 2001  
<http://lts.apps.em.doe.gov/center/stewstudy.html>

#### *INEEL Long-Term Stewardship*

- INEEL Long-Term Stewardship Strategic Plan, DOE/ID-11008, Rev. 0, September 2002  
<http://www.inel.gov/environment/lts-strat-pln-doe-id-11008-r0.pdf>
- INEEL Long-Term Stewardship Baseline Report and Transition Guidance, INEEL/EXT-01-01410, November 2001
- INEEL Long-Term Stewardship Public Involvement Plan, INEEL/EXT-01-01445, Rev. 0, October 2001
- Comprehensive Facility Land Use Plan, DOE/ID-10514, U.S. Department of Energy Idaho Operations Office (1998)  
<http://mceris/wag/>
- INEEL Long-Term Stewardship Implementation Plan (July 2003 Draft)

# What does the Long-Term Stewardship Program do ?

- Manages the natural environment
  - Surveys and monitors groundwater and soils
  - Manages the ecosystem (such as the Sagebrush Steppe Preserve)
  - Controls weeds
- Protects historic and cultural resources
  - Buildings and structures eligible for listing on the National Register of Historic Places
  - Resources of interest and value to the heritage of the Shoshone-Bannock Tribes
- Enforces institutional controls and places access control signs
- Operates long-term groundwater treatment processes
- Maintains barriers, caps, entombed building and containment structures
- Takes care of long-term record keeping and information management
- Prepares five-year reviews of cleanup sites as mandated by law
- Promotes stakeholder involvement and communication

## Summary

DOE will continue to maintain the safety and health of the public and the environment and continue to conserve the natural, ecological



Resource study of INEEL cave

and cultural resources of the INEEL. Please take advantage of these involvement opportunities to learn more about the LTS program and provide us with your ideas for better stewardship and a better INEEL.

## Stakeholder Involvement Opportunities

The INEEL makes LTS information available to the public in several ways. These include:

- Briefings and discussions with stakeholders and Tribal governments
- A toll-free phone line (1-800-526-5620) that allows anyone to ask questions and request documents related to the INEEL LTS Program
- Distribution of fact sheets and brochures
- A mailing list of interested individuals is maintained for citizens who have expressed interest in receiving information related to LTS
- A World Wide Web site (<http://www.inel.gov>) that provides information on all aspects of the INEEL, including the LTS Program (<http://www.inel.gov/environment/ineel-lts.shtml>)
- Document reading rooms in Idaho Falls and Boise areas

### For More Information

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