

## *Environmental Life-cycle Management at Sandia National Laboratories*

*“Look deep into nature, and  
then you will understand  
everything better.”*

*~Albert Einstein*

### **What is Environmental Life-cycle**

#### **Management?**

The Sandia National Laboratories (SNL) Environmental Life-cycle Management (ELM) Program (formerly the Long-term Environmental Stewardship (LTS) Program), involves stewardship activities for past, present and future activities. The ELM program “promotes the long term stewardship of a site’s natural and cultural resources throughout its operational, closure, and post closure life cycle” (Department of Energy Order 450.1A, *Environmental Protection Program*).

The ELM Program is intended to apply the lessons learned from the environmental restoration project, which spent over 14 years cleaning up legacy sites at Sandia National Laboratories. The lessons include considering the inherent costs of cleanup for Sandia’s activities that adversely impact the surrounding environment.



Sunrise over Sandia National Laboratories



Hummingbird at Sandia National Laboratories

### **What is Long-Term Stewardship (LTS)?**

The Long-term Stewardship (LTS) Program at SNL works with legacy waste sites that require additional monitoring and maintenance measures.

Sandia’s LTS activities have been increasing as the Environmental Restoration (ER) Project continue to complete closures of ER legacy sites. The majority of clean up work has been completed; however, there are several sites awaiting final closure by the New Mexico Environment Department (NMED).

### **Life-Cycle Management Through the NEPA Review Process**

The ELM Program reviews all proposed projects and activities that have the potential to impact the environment through the National Environmental Policy Act (NEPA). The NEPA is a federal law that requires federal agencies, and their contractors, to consider environmental aspects and impacts in their decision-making



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Scaled Quail at Sandia National Laboratories

on proposed actions. At Sandia, consideration of the environment happens early in proposed project planning and is documented through the Integrated Safety Management System (ISMS) electronic NEPA Module. A NEPA review is required for all federally-funded proposed actions, including privately funded actions performed on federal facilities. In effect, NEPA applies to all SNL activities performed on private and government properties. Through these NEPA reviews, ELM strives to minimize a project's overall environmental impacts.

## Community Checklist

The Community Checklist currently lists community members' questions about environmental stewardship at Sandia. The Community Checklist is reviewed annually and the updated document is available on the ELM website.

## Unneeded Materials and Chemicals (UMC)

The UMC Project at Sandia National Laboratories (SNL) was developed in response to a DOE initiative requiring all facilities in the DOE Complex to compile an inventory of chemicals, materials, and equipment that are no longer needed. The inventory items must be removed by the end of Fiscal Year (FY) 2011.

As of mid FY 2010, 98% of the UMC inventory at SNL/NM has been removed following the hierarchy of re-use, recycle, and disposal as waste. A parallel effort for SNL operations at the Tonopah Test Range (TTR) has removed 50% of the items in the TTR UMC inventory. Plans are in place at both sites to complete the disposition of UMC inventory items by the end of FY 2011. The DOE initiative also requires sites to put processes in place to mitigate future accumulation of unneeded chemicals and materials. SNL has implemented two processes that address this requirement. The Chemical Exchange Program (CEP) is a virtual system that allows members of the SNL workforce to submit and acquire chemicals, and the Get Rid of It website provides guidance to the workforce about disposition options for hundreds of categories of materials, equipment, and chemicals that are no longer needed.

## Contact Us!

For more information about ELM at Sandia, visit our website for a Calendar of Events, the Community Checklist, and e-mail contact information:

<http://ltes.sandia.gov/>

