

Cleaning Up the Nuclear Legacy



Honor Legal Agreements

More than six decades of U.S. nuclear weapons research, testing, and production activities have left dozens of Department of Energy (DOE) sites polluted with massive amounts of radioactive and hazardous wastes. Most DOE sites are now on the Superfund list of the nation's most environmentally dangerous facilities. Their contamination threatens millions of people living near the sites or along major waste transportation routes. Some of the nation's most important water resources are endangered, including the Columbia River, Snake River aquifer, and Savannah River.

Legal agreements for the sites with states and the Environmental Protection Agency (EPA) include milestones by which cleanup activities should be accomplished. While many activities are on schedule, DOE has missed numerous milestones, resulting in fines and penalties, increased contamination, and escalating costs. Some of the cleanup tasks, especially related to contaminated groundwater, require development and implementation of new technologies that will require additional funds. Despite some progress, the FY 2011 Budget Request estimates that lifecycle costs remain at \$274 billion to \$329 billion. Site cleanup schedules stretch at least to 2038 and as long as 2062 for the Nevada Test Site, Savannah River Site (SC), Idaho National Laboratory, Paducah (KY), Portsmouth (OH), and Hanford (WA).

American Recovery and Reinvestment Act (ARRA) Provides Funds

The 2009 Stimulus Act provided an additional \$6 billion for DOE Environmental Management (EM) cleanup programs. It also required transparency in how DOE spends the money in order to increase public involvement. The funds are being allocated to accelerate some remediation projects and create thousands of jobs at sites in 12 states.

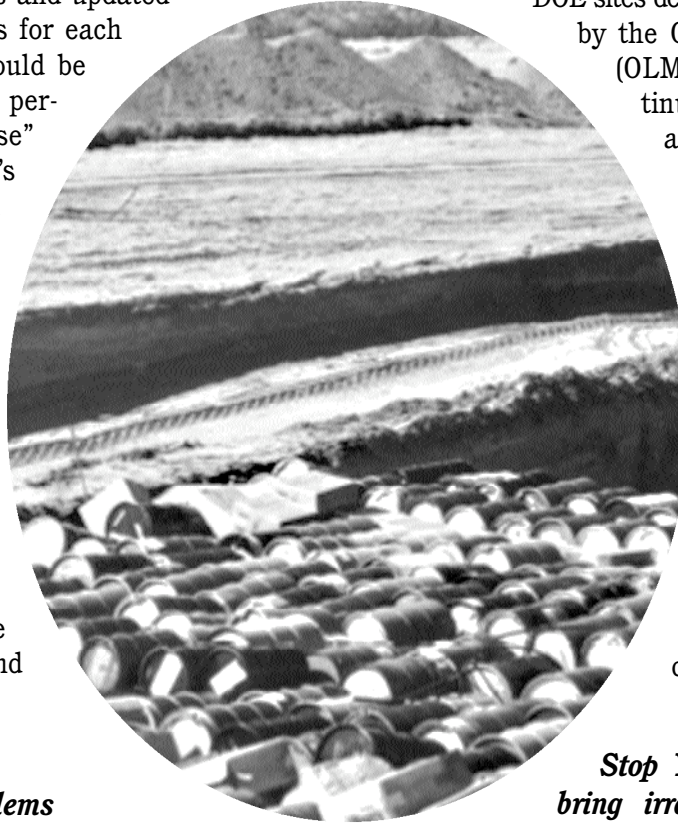
Transparency and Public Participation Needed

The disclosure requirements of the ARRA should be implemented for all DOE Environmental Management programs. Such a system would provide additional transparency and accountability. That, in turn, will result in more cost-effective cleanup.

Recommendations

- Provide sufficient funding for environmental cleanup to assure compliance with all cleanup agreements and legacy management requirements.
- Maintain a publicly accessible database showing all cleanup agreement milestones and the funding needed to meet them.
- Disclose cleanup contracts, except for proprietary information.
- Bar the disposal of radioactive and chemical wastes in unlined pits and trenches.
- Prohibit import of foreign "low level" waste.
- Stop funding for Yucca Mountain.

These reforms are very much needed. DOE has yet to provide a publicly accessible database of its thousands of cleanup milestones and updated baseline cost and schedules for each site. Cleanup contracts should be made public, including the performance measures for “base” and ARRA funds. DOE’s budget requests should seek full funding for all cleanup milestones in any given year, and they should show the amounts needed to comply with the agreements. DOE should provide annual evaluations of whether performance measures are met at each site. If milestones are not attained, DOE should explain the reasons and the effects on future costs and schedules.



Legacy Management Must Fulfill Its Commitments

DOE sites declared “closed” are administered by the Office of Legacy Management (OLM), though many still have continuing requirements for funding and public involvement. Budgets of hundreds of millions of dollars annually for decades to come are needed for worker pensions, ongoing monitoring and groundwater remediation, public information, and community participation at dozens of sites, including Rocky Flats (CO), Fernald and Mound (OH). Additional sites should not be transferred to OLM until cleanup is complete.

New Waste Worsens Problems

Many large DOE sites where cleanup activities are in progress – Kansas City (MO), Livermore (CA), Los Alamos (NM), Nevada Test Site, Oak Ridge (TN), Pantex (TX), Sandia (NM), and Savannah River (SC) – are also involved in design, testing, and production of nuclear weapons. Those activities produce radioactive and toxic waste. Even more would be created for decades to come by new weapons production and reprocessing of irradiated fuel.

Moreover, DOE continues to dump waste in unlined pits and trenches at some sites. That practice creates the need for additional cleanup in the future. Private waste company EnergySolutions is proposing to import 20,000 tons of Italian low-level nuclear waste, process it at Oak Ridge, TN and dispose of it at its Utah facility. Importing foreign nuclear waste would reduce the disposal capacity for U.S. wastes.

Stop Yucca Mountain and do not bring irradiated fuel to DOE sites

DOE is bringing an end to the waste of billions of dollars on the flawed Yucca Mountain site in Nevada, which for 23 years has been the only place considered for geologic disposal of DOE high-level waste and commercial irradiated fuel. DOE high-level wastes at Savannah River, Hanford, and Idaho must be safely removed from leaking storage tanks, solidified and placed in long-term safe and secure storage. Alternatives for what will happen to those wastes over the many generations that they will be hazardous must be fully discussed with affected communities to develop improved solutions. Adequate monitoring of waste and safety standards that protect public health and the environment must be maintained along with state regulatory authority over the sites.

Additional wastes should not be sent to DOE sites because they divert financial and management resources away from addressing the threats posed by existing waste. Therefore, those sites should not be considered for storage or disposal of irradiated nuclear fuel from commercial reactors.