

Radwaste Solutions

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Features



A monument sits in the middle of the forest in the state of Mississippi. To learn what it commemorates, see the article beginning on page 26.

Cover Stories—Environmental Remediation

Getting Remediation Done at ORNL

At Oak Ridge National Laboratory, four environmental remediation projects are making significant progress in reducing risk to site workers, the public, and the environment, while also enabling redevelopment opportunities in an area of the national laboratory that is being cleared of decaying, excess facilities.

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Enhanced “Interrogation” Techniques: Soil Contamination

Imaging at Hanford

Surface Geophysical Exploration technology may not be the magic answer to finding contamination in the soil, but the more it is used at Hanford, the more ways scientists find to improve it.

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From Test Site to Wildlife Refuge: Tatum Salt Dome Test Site

Transferred to State

The DOE Transferred surface ownership of the Tatum Salt Dome Test Site (also known as the Salmon Site) to the state of Mississippi for use as a wildlife refuge and working demonstration forest.

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Permeable Reactive Barriers: Advancing Natural In-Situ Remediation for Treatment of Radionuclides in Groundwater

Since the early 1990s, the advent, development, and progression of permeable reactive barrier technology has allowed passive in-situ groundwater remediation to evolve from an “innovative” method to one that is considered accepted and mature for the treatment of industrial contaminants.

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Groundwater Restoration at the La Rosita In-Situ Uranium Recovery Project

Since groundwater restoration activities at the Rosita project began, approximately 1.3 billion gallons of groundwater have been processed and cleaned.

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It’s Complicated: The Complexities of Decommissioning a Uranium Mine Site

Due to the involvement of three regulatory agencies, high public interest, and a complex geologic setting and groundwater flow regime, decommissioning the Homestake Mining Co. uranium mine in New Mexico is not a straightforward endeavor.

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Reports

Draft Report from the Blue Ribbon Commission on America’s Nuclear Future—Executive Summary

There is an urgent need to change and improve our strategy for managing the high-level wastes and spent fuel that already exist and that will continue to accumulate as long as nuclear reactors operate in this country. This is the focus of the Blue Ribbon Commission’s work and of the specific recommendations in this report.

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Report of the American Nuclear Society’s President’s Special Committee on Used Nuclear Fuel Management Options—Executive Summary

Factors likely to be important when selecting options for storage, treatment, and disposal of used nuclear fuel are identified and discussed.

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Meeting Report

Very Long Term Dry Fuel Storage . . . and Other Issues

A report from the American Nuclear Society’s 2011 Annual Meeting, held June 25–30, 2011, in Hollywood, Fla.

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On the Cover:

Clockwise from top: ORNL workers deal with contaminated debris encountered during trench excavation; a drill operator lowers a cable of electrodes into a hollow pipe at a Hanford tank farm to locate plumes of radioactive and chemical waste; a contractor to the DOE’s Office of Legacy Management collects groundwater samples at a former nuclear test site. In a section beginning on page 15, several articles examine environmental remediation efforts at DOE and commercial nuclear sites around the country.

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