

Radwaste Solutions

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Wrapping a BIG birthday present? Check out the photo essay beginning on page 48 to see just what's going on here.

Features

Cover Stories—Spent Fuel/High-Level Waste

Back to the Future: A Rationalized Rock Salt Repository

24

A look at going “back to the future” of rock salt geologic structure as the preferred approach to effecting a final HLW repository in the United States.

Everything Old Is New Again

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Removing waste from Hanford’s storage tanks is one of the most difficult environmental challenges in the entire DOE complex. Because of the hazardous materials inside the tanks, all work must be done by remote control. That’s where the new venturi system comes in.

Breaking Good

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Study examines durability of glass with ties to nuclear waste storage.

55-Inch Hole Safely Cut into the Dome of Hanford’s Tank C-107

48

The 55-in.-diameter hole is the largest cut into an active DOE radioactive waste storage tank, and it creates the access for the largest robotic arm developed to date for removing radioactive and chemical wastes from the tanks.

Perspective

The Tragedy of Yucca Mountain—Part II

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More on the topic of how politics, rather than science and integrity, has dominated the decision to terminate all activities related to the Yucca Mountain high-level radioactive waste repository.

Other Feature

Stimulus Dollars Help Communities Recover

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The Army Corps of Engineers’ New York District has been using stimulus money successfully through their FUSRAP program and in support of the EPA’s Superfund program.

Waste Management 2010 Best Papers

Just How Risky Is It? Comparisons of the Risks of Transporting Radioactive Waste

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The risks of transportation of spent fuel are significantly mitigated in that there are relatively few shipments, shipments involve largely nondispersible material, and robust thick-walled accident-resistant containers are used.

Targeting Chromium in Hanford’s 100-D Area

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Reports on the results from three tests supporting groundwater remediation of hexavalent chromium in Hanford’s 100-D Area.

Meeting Reports

Clearing the Way for the Next Generation

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A report from the 2010 ANS Decommissioning, Decontamination and Reutilization Topical Meeting, held August 29–September 2, 2010, in Idaho Falls, Idaho.

The Changing Paradigm for LLW Management

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A report from the Fourth Annual RadWaste Summit, held September 7–10, 2010, in Las Vegas, Nev.

After Yucca Mountain: What’s Next?

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A report from the 2010 ANS Winter Meeting, held November 7–11, 2010, in Las Vegas, Nev.

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On the Cover:

A map of rock salt deposits in the contiguous United States. The article beginning on page 24 looks at the possibility of a rock salt high-level waste repository in our future.

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Low-Level Waste