

The Journey of a Thousand Miles

“The journey of a thousand miles must begin with a single step.” This proverb may be more than 2500 years old—it comes from *The Way of Lao Tzu*, sixth century B.C. (BCE), according to my copy of *Bartlett's Familiar Quotations*—but it remains apt today. When we talk about waste transportation (this issue's theme), it seems that single steps are the only way anything moves at all. (Not that there's anything *wrong* with that!)

- The U.S. Department of Energy took one of those single steps at the end of last year when it issued its “Strategic Plan for the Safe Transportation of Spent Nuclear Fuel and High-Level Radioactive Waste to Yucca Mountain.” This plan presents the strategy and describes the process the DOE's Office of Civilian Radioactive Waste Management will use to work cooperatively with all stakeholders and interested parties to refine the Yucca Mountain transportation system as it is developed. That plan is reprinted in this issue on pp. 18–24.

- The individual corridor states are *very* interested parties in the DOE's transportation plan. In this issue, we present an article from a staffer at The Council of State Governments' Midwestern Office, who discusses the issue of partnerships between states and the DOE in transportation planning. States and the DOE have worked together successfully in the past for shipments to the Waste Isolation Pilot Plant and for other programs, including the Foreign Research Reactor Acceptance Program. The article on pp. 13–17, “Transportation Cooperation: Involving Corridor States in Decision Making Contributes to the Success of the DOE's Transportation Program,” outlines what states want and need in the way of information and cooperation from the DOE in a Yucca Mountain transportation system.

- For the past couple of years, when-

ever I encounter folks opposed to transporting waste to Yucca Mountain, I always hear, “What about the Baltimore tunnel fire?” In this issue, we present the answer to that question. The article on pp. 26–29, “Fire in the Tunnel: A Study of Effects on a Spent Fuel Transportation Cask,” reports on a U.S. Nuclear Regulatory Commission study of the fire and its possible effects on a typical spent fuel cask. During the tunnel fire, temperatures were predicted to be as high as 1000°C in parts of the tunnel and the tank car carrying liquid tripropylene burned for about three hours. There was enough fuel in the tank for an estimated six- to seven-hour burn. So, just to be on the conservative side, the NRC modelers assumed maximum temperatures throughout the incident and a *150-hour* burn, with a spent fuel cask car positioned directly next to the tank car (despite regulations requiring a “buffer” car between a spent fuel transport car and any car carrying hazardous or flammable materials). The result? Read the article and find out. (Hint: It's good news.)

Incidentally, this article is based on the paper that won the Best Oral Paper Award for Waste Management 2003. It has become a tradition for this magazine to publish the Waste Management Best Oral Paper and the Honorable Mention Oral Paper award winners in the March/April issue, and we again thank the people who run the Waste Management conferences for their support and cooperation.

- The Honorable Mention Oral Paper presents an intriguing idea for transporting mill tailings to a cleanup/disposal site: a slurry pipeline. The article on pp. 30–37, “Transporting the Moab Uranium Mill Tailings to White Mesa Mill by Slurry Pipeline,” notes that “slurry pipelines are becoming an increasingly common means of moving large volumes



Taking Some Single Steps

of materials. They don't compete with other surface transportation corridors and do not interfere with ongoing commerce on existing highways and rail lines.”

These articles represent steps on the journey the DOE has before it as it works to clean up old mining, research, bomb production, and other Cold War-era sites and as it develops the nation's first high-level waste and spent fuel repository. Step by step, the DOE is making progress in these efforts. Step by step, mile by mile, until the job is done.—Nancy J. Zacha, Editor