

EPA to share risk of innovative remediation technologies

EPA announced in March that it will begin sharing the cost of failed innovative remediation technologies at Superfund sites. Though agency observers applauded the move, some feel that it does not go far enough.

The "Superfund Reform Initiative 9a" risk-sharing program is the outgrowth of a pilot conducted last year to evaluate using a permeable barrier wall technology in conjunction with a previously untested mixture of metals and organic compounds at a site in Somersworth, N.H. The program will pay site owners up to \$10 million or up to half the cost of a failed innovative remedy—whichever is lower—after the technology has been approved by the agency's technical evaluation panel. The program applies only to full-scale cleanup projects at sites not owned by the government.

The agency is looking for tech-

nologies to deal with in situ groundwater remediation, non-aqueous phase liquids, recovery, and treatment of wastes in fractured bedrock, arsenic and mercury, complex waste mixtures, and alternatives to conventional stabilization processes for metals and other inorganics. The program's initial budget is \$40 million.

"The incentive is to calm the fears of potentially responsible parties who have worried that they'd have to pay twice: the first time for the innovative technology, and the second time to get it right," said Walter Kovalick, Jr., director of EPA's Technology Innovation office. "Historically, there's been very little incentive to use innovative remediation technologies," agreed Grant Ferrier of Environmental Business International, a San Diego-based research and publishing firm. "The whole remediation business

has been characterized by error and trial, as opposed to trial and error," he quipped. "Now if a technology fails, EPA isn't going to put you on trial."

Though Ferrier called the program "a step in the right direction," he characterized it as "two steps on a thousand-step march," given the nation's magnitude of contaminated sites that remain uncleaned.

In the first month after the program was announced, there were a handful of inquiries and none of them panned out, according to Jim Cummings of the Technology Innovation Office. He expressed disappointment, speculating that the low rate of inquiries could result from the popularity of competing options like capping, containment, and natural attenuation. Interested site owners should contact their regional EPA offices. —KELLYN S. BETTS

DOD criticized for failure to estimate future environmental liability

The Department of Defense (DOD) is unable to incorporate environmental considerations into its decision-making process because its accounting procedures ignore environmental liabilities associated with its weapons systems, according to the General Accounting Office (GAO). Handling these liabilities, which are associated with its current use of aircraft, nuclear submarines, missiles, and training ranges, would cost tens of billions of dollars, said George Stalcup, assistant director in GAO's Accounting and Information Management Division.

GAO criticism of the Defense Department's failure to fully estimate its environmental liabilities formed part of a comprehensive analysis of DOD financial management problems presented in April by Gene Dodaro, a GAO assistant comptroller general, in testimony before the House of Representatives Committee on Government Reform and Over-

sight. The hearing highlighted problems raised by the first-ever audit of the consolidated financial statements of the federal government, mandated by Congress to improve efficiency.

DOD reported \$38.7 billion in estimated environmental cleanup and disposal liabilities for fiscal year 1997. This estimate included environmental restoration of active and inactive bases, cleanup of formerly used sites, and cleanup and disposal costs of certain chemical weapons. But it did not estimate environmental cleanup and disposal costs associated with military weapons systems or training ranges. As a result, "DOD's undisclosed liability in this area is likely understated by tens of billions of dollars," Dodaro said.

Accounting procedures that allow businesses to estimate their future environmental liability are now common practice in large corporations, said Kate Probst, economist with the nonprofit re-

search group Resources for the Future. Because the practice allows corporations to focus on future environmental disposal costs, it encourages managers to develop ways to reduce the pollution before it is released, Probst said.

To comply with recently enacted government accounting rules, the department plans to include liability cost estimates in the next consolidated financial statement for the 1998 fiscal year, a department spokesperson said. "The defense department considers the environmental consequences of its decisions. We just [haven't] use[d] these accounting procedures. This is not about decision making, it is about using a standard way to report numbers."

GAO has issued several reports recently arguing that the environmental costs of weapons systems can be estimated. Inactivation and disposal activities related to a nuclear submarine could range from \$19 million to \$61 million. Cleanup and disposal costs for training ranges were estimated at \$19.5 billion, according to a 1996 DOD study. —REBECCA RENNER