

6. Policy Position

Expedited Multi-site Deployment of Environmental Technologies

BACKGROUND

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA) were passed by Congress in the 1980s and heralded as the answers to the Nation's hazardous and solid waste disposal problems. For many reasons, these laws failed to achieve the desired results. States must bear some responsibility for the ineffectiveness of these measures as programs to permit and certify clean-up technologies have caused lengthy delays in implementing new strategies proposed by technology developers. This has led to the demise of many small businesses that were engaged in deploying environmental remediation technologies.

Recently, U.S. Environmental Protection Agency (EPA) officials appeared before a House subcommittee to explain why efforts to promote better environmental technologies have been sluggish. A finding of the House subcommittee was that the most significant factor inhibiting technology innovation is "the prescriptive nature of the environmental policy framework, including regulatory, permitting and enforcement programs at the federal, state and local levels."

Implementation of environmental remediation technologies is a key objective of the Department of Energy (DOE) Environmental Management's (EM) Office of Science and Technology. The Department of Energy has invested billions of dollars in developing and demonstrating innovative technologies for remediation of contaminated sites at federal facilities. These technologies also are commercially viable for implementation at industrial sites that are subject to federal and state regulations.

A key barrier to the deployment of new technologies that contain/remediate contamination and accelerate site conversions is permitting. This problem is common at state and federal regulatory agencies. Regulators can affect market penetration of environmental technologies.

The states in the southern region have wide variances in the regulatory programs that impact commercialization of environmental technologies. These states share an interest in fostering investment returns from new environmental technologies - technology dividends - through partnerships and leveraging within government and between government and the private sector.

While a state-by-state approach will lead to furthering technology penetration, a multi-state effort with leveraging from industry will expedite changes for the integration of new innovations into the regional marketplace. This effort should allow the "pull" of permitting change by state regulators and industry rather than to "push" permitting change from federal facilities.

Currently, some states are moving toward risk-based processes to determine the most cost-effective and beneficial clean-up goals. To set a regulatory standard, agencies can choose

between basing the standard on design or performance. Design standards specify how a product should be built, what technology should be used, or precisely how to reach a regulatory goal. Performance standards generally are superior to design standards: they allow the regulated community to meet or exceed the regulatory goal in the most cost-effective manner.

Design standards freeze technology and impede innovations that can produce better, faster and cheaper results. The idea is to stipulate the performance achieved in successful technology demonstration deployment rather than to dictate the technology or technology approach. This strategy can preserve an information advantage for companies that perform demonstrations, but at the same time it will foster competition for cost-effective solutions.

Additionally, funding for state underground storage tank programs is dwindling. This dilemma is demanding that state regulatory agencies prioritize sites based on the extent of the contamination. Unfortunately, because of decreasing funds, many sites will be left contaminated and useless for future development.

When contaminated sites are vacant or under-utilized properties, they are referred to as "brownfields." The potential for reuse or redevelopment is affected by known or perceived contamination.

Brownfield redevelopment offers many socio-economic benefits, such as increased employment and tax revenues for the community. Market forces must be brought to a balance that will begin to make brownfields economically competitive. Brownfields can have value if states will provide incentives for developers to achieve a reasonable level of clean-up for a specific use of the property. One barrier to any initiative is based around the "third party" liability exposure for any owners of the land. Regulatory processes currently do not allow for cost-effective and efficient clean-up of these properties.

Finally, some states are instituting offices in their regulatory agencies to specifically provide attention to "innovative technologies." These states have personnel that are dedicated to understanding the benefits of these technologies to achieve state clean-up goals.

RECOMMENDATION

In recognition of the need to address expedited multi-site deployment of environmental technologies, the Southern Legislative Conference of The Council of State Governments recommends that the southern states:

- ◆ implement "risk-based" approaches to achieve appropriate clean-up levels for a specific contaminated media to provide greater efficiencies of deploying innovative technologies that will achieve performance-based clean-up levels;
- ◆ establish clean-up levels and shared responsibility of risk for responsible parties in the remediation of brownfields and federal facilities;

- ◆ accept scientifically-based performance data from other states or sites in order to expedite regulatory acceptance of new technologies from state to state and site to site in a cost-effective and efficient manner;
- ◆ review regulations for funding of state underground storage tank programs to eliminate barriers to cost-effective clean-up of contaminated sites;
- ◆ provide the necessary resources for their regulatory agencies to achieve the state's environmental goals;
- ◆ encourage states to establish "innovative technology" liaison operations to further regulatory acceptance; and
- ◆ support the Southern States Energy Board's Permitting Leadership in the United States (PLUS) Program as the lead initiative in the southern region to provide an established network to assess the environmental policy framework and deployment of environmental technologies.