

# ICJR Research Brief

## Understanding Superfund

Established by Congress in 1980 and reauthorized in 1986, the Superfund program is designed to handle emergencies arising from abandoned toxic waste sites and to provide long-term cleanup for sites that pose significant threats to health and to the environment. Superfund uses a liability-based system to finance such cleanups. If the Environmental Protection Agency (EPA), which administers Superfund, can identify potentially responsible parties, it tries to persuade them to undertake cleanup themselves; alternatively, the EPA pays for cleanup from the Superfund trust fund and then tries to recover its costs by taking the potentially responsible parties to court. If no potentially responsible parties can be identified, Superfund pays for cleanup. Through the use of this liability-based approach, Superfund aims to provide incentives for improving future disposal practices.

Superfund is a controversial program from many perspectives—in terms of what it has accomplished, how it assigns costs and responsibilities, how it is financed, and how well the EPA is managing it. Because the program is complex and because data describing its accomplishments are inconsistent and incomplete, policymakers have lacked a basis for understanding the net effects of its various incentives and provisions.

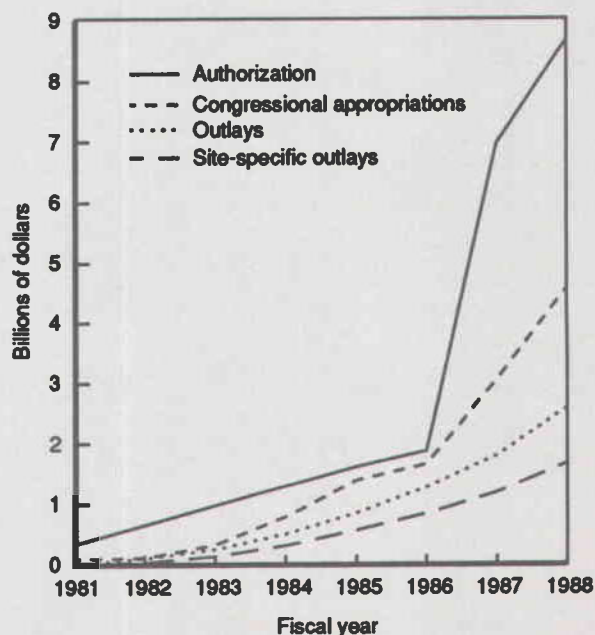
Our research seeks to determine the effects of the liability-based system and Superfund's administrative procedures on the program's pace and cost and on the nature of the remedies selected. We are also examining the legal and administrative costs in relation to the program's outlay on remedy and cleanup. *Understanding Superfund: A Progress Report (R-3838-ICJ)*, by Jan Acton, describes the initial stage of this ongoing analysis. It lays the foundation for a comprehensive

assessment by describing the Superfund program and presenting some preliminary measures of its performance based on federal data.

### Superfund's progress

Although the study is limited to the federal side of the Superfund ledger, its findings are striking. As of September 1988, only 34 toxic waste sites had been declared clean out of 1175 the EPA has placed on its National Priority List for immediate attention. As many as 30,000 hazardous waste sites may eventually need cleanup.

The EPA's actual outlays under the program are relatively modest compared with appropriations.



Comparing cumulative authorizations, appropriations, and outlays in Superfund's first eight years

The trust fund for the program had a ceiling of \$1.6 billion from 1981 to 1985 and has a ceiling of \$8.5 billion from 1986 to 1991. Cumulative appropriations from Congress through September 1988 have been \$4.2 billion; cumulative outlays by the EPA have been some \$2.6 billion. Of that \$2.6 billion, according to EPA records, \$1.6 billion has been spent on cleaning up sites; the rest has apparently gone to overhead and to transaction costs.

The EPA's success in recovering prior outlays for cleanup, or in transferring future costs to responsible parties, has also been modest. The EPA has recovered \$230 million in past expenditures from responsible parties. It has also secured agreements for private funding of some future activities from fewer than 500 parties. The projected value of these agreements is approximately \$1 billion. However, this estimate is uncertain because relatively few sites have completed the cleanup process and because the EPA does not monitor actual outlays by private parties.

### ***Next steps in analysis***

We don't know yet why site-specific outlays and cost recoveries appear small. Possible reasons include reluctant EPA leadership, the need for sites to "mature" to the stage at which major expenditures are necessary, the program's emphasis on liability and cost recovery, and the program's operating efficiency.

Also, the EPA's pattern of outlays may not be representative of overall program impact. For example, if the liability-based system is inducing many private parties to clean up sites voluntarily, then the EPA's noncleanup expenses may be modest in comparison with the total national cleanup effort.

A clearer understanding of Superfund's effects requires more detailed analysis. In the second phase of this research, we will examine the pattern of activities and expenditures by the other major participants in the cleanup process: state and local governments, private parties, and insurers. By analyzing selected individual hazardous waste sites, we hope to identify the factors that contribute to differences in the pace, cost, and outcome of activities across sites; to compare transaction costs with cleanup costs; and to understand the extent to which Superfund has induced socially appropriate voluntary or preventive cleanups.

The research summarized in this brief was carried out within the Institute for Civil Justice of The RAND Corporation. Research results are described in detail in R-3838-ICJ, *Understanding Superfund: A Progress Report*, by Jan Paul Acton, 65 pp., \$7.50.

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