

July 31, 1995

HOW TO RESCUE SUPERFUND: BRINGING COMMON SENSE TO THE PROCESS

INTRODUCTION

Congress likely will consider legislation this year to reauthorize the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Superfund, as CERCLA is popularly known, not only is one of the most complex laws now in force, but also is widely regarded as both wasteful and ineffective. Even the Clinton Administration admits the program does not work. One reason for this is that, despite expenditures of between \$20 billion and \$30 billion, Superfund has failed to clean up more than a small fraction of the nation's worst hazardous waste sites. Under the current law, cleanup of the remaining current and potential sites could cost additional tens of billions of dollars.

Fortunately, there is an opportunity for substantive reform in Congress this year. Senator Robert Smith (R-NH), Chairman of the Senate Committee on Environment and Public Works Subcommittee on Superfund, Waste Control, and Risk Assessment, and Representative Michael Oxley (R-OH), Chairman of the House Committee on Commerce Subcommittee on Commerce, Trade, and Hazardous Materials, early this session decided to undertake a top-to-bottom review of the program.¹ "If you recognize [Superfund] when we are done," declared Oxley recently, "we won't have done our jobs."²

Congress must correct the fundamental flaws in the current program, not merely tinker with the statute as last year's bills would have done.³ Reform should address the core elements of the Superfund structure that fuel litigation, slow cleanups, raise costs, and, most

1 Both have recently introduced principles for fundamental reform of the law.

2 Speaking before the National Energy Resources Organization (NERO) in Washington, D.C., June 14, 1995.

3 S. 1834, introduced by Senator Max Baucus (D-MT), and H.R. 3800, introduced by Representative Al Swift (D-WA).

important, encourage the cleanup of sites that pose little risk to human health and safety and divert scarce economic resources from sites that may pose real dangers.

Specifically, Superfund reform should:

- ✓ Encourage faster cleanups;
- ✓ Eliminate most of the need for lawyers and courts;
- ✓ Reduce total spending on CERCLA compliance;
- ✓ Be fairer to those who now pick up the tab for other people's pollution;
- ✓ Prioritize risks so that the most public safety possible is bought for the money spent;
- ✓ Encourage similar reforms at high priority state sites;
- ✓ Give states authority over a local problem;
- ✓ Give states funding to pay for their new responsibilities;
- ✓ Ensure public safety by continuing to allow immediate cleanup of sites that pose an imminent threat to human health;
- ✓ Reduce taxes on businesses;
- ✓ Encourage competitive bidding for cleanup work;
- ✓ Reduce total federal spending;
- ✓ Reimburse firms that have cleaned up sites under the current law for a portion of their costs; and
- ✓ Reduce potentially responsible parties' (PRPs)⁴ annual costs substantially.

LARGE COSTS AND FEW RESULTS

The Superfund program was enacted after widespread press attention to the exposure of residents to high levels of dangerous chemicals at Love Canal near Niagara Falls, New York.⁵ Intended to force companies to clean up hazardous waste sites, the law also established a government fund to pay for cleanup of "orphan sites," which are contaminated properties where no responsible party exists—where the polluter, for example, has gone out of business.⁶ The law was hurried through Congress in the final days of the Carter

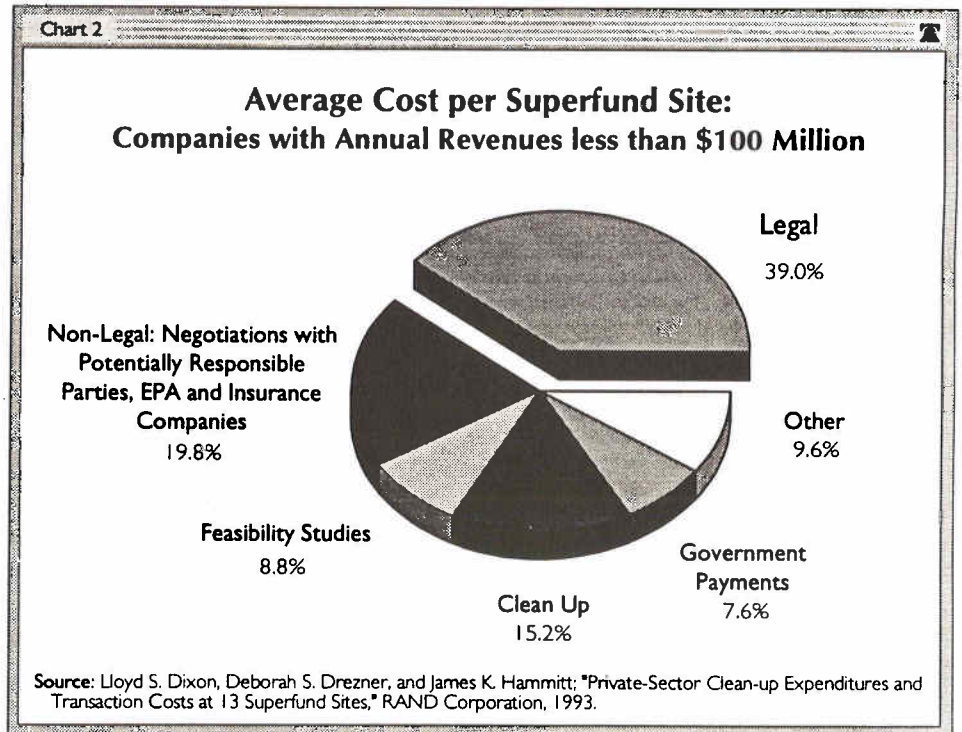
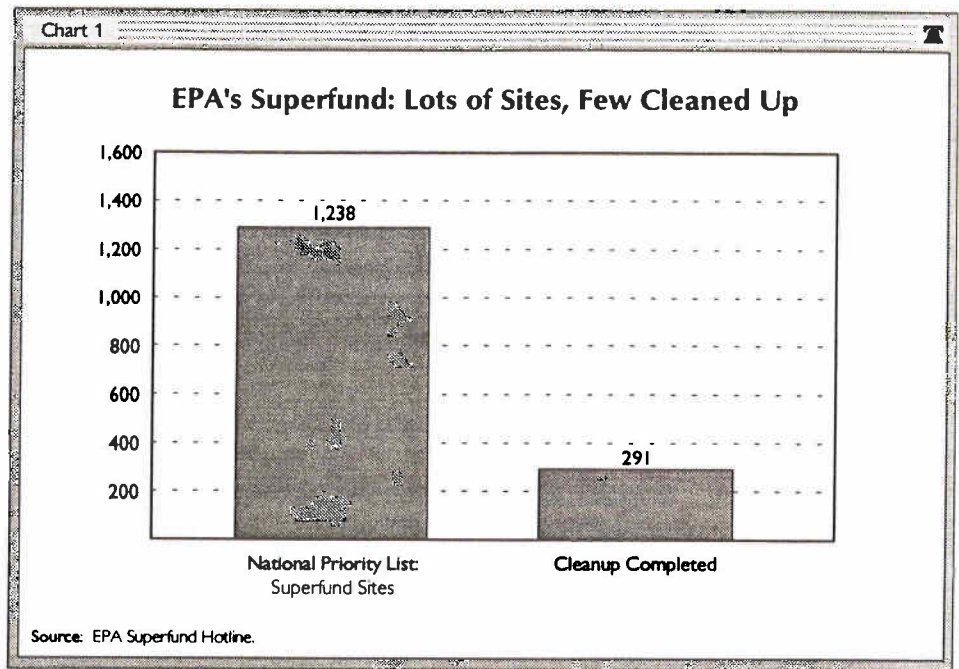
4 The term used in CERCLA to designate parties potentially liable for hazardous waste sites.

5 It is important to note that the company that buried the chemicals in the area, Hooker Electrochemical Company, buried them in a thick protective tube of impermeable clay with the intent of maintaining ownership of the land. Unfortunately, the Niagara Falls Board of Education, through threat of eminent domain, effectively forced the company to sell the land (for \$1), despite the company's warnings that the land was contaminated and not fit for public use. A public elementary school was built on the site, and city construction crews bulldozed through the clay seal, allowing the chemicals into the surrounding soil. Additionally, some of the land was sold off for residential housing. Thus, the problems at Love Canal were the direct result of government interference.

6 42 U.S.C. sec. 9601 *et seq.*; PL 96-510, as amended by 97-216, July 18, 1982; PL 97-272, September 30, 1982; PL 98-45, July

Administration, and many provisions were ill-considered. Although estimates vary, most experts agree that the program has cost at least \$20 billion while utterly failing to clean up most hazardous waste sites. Explains Carol Browner, Administrator of the Environmental Protection Agency (EPA), "A lot of time and money is taken up with companies suing each other over how much they owe to clean up a particular site."⁷

Congress authorized \$15.2 billion for CERCLA's trust fund during the 1990 budget deal. Of this amount, \$10.8 billion was spent by the federal government through fiscal 1994. The amount spent by companies and individuals to comply with CERCLA has raised the over-



12, 1983; PL 99-160, November 25, 1985; PL 99-499 (Superfund Amendments and Reauthorization Act of 1986 (SARA)), October 17, 1986; PL 100-202, December 22, 1987; PL 101-144, November 9, 1989; PL 101-508, November 5, 1990; PL 101-584 (Superfund Surety Bonding), November 15, 1990; PL 102-389, October 6, 1992; and PL 102-426, October 19, 1992.

⁷ Remarks to U.S. Chamber of Commerce Policy Insiders Breakfast, February 16, 1994.

all price tag by many billions of dollars.⁸

Much of this cost has been spent not on cleanup, but on legal fees and other “transaction costs.” And while program costs have ballooned, cleanups have proceeded slowly. Only 291, or about 24 percent, of the 1,238 “worst” hazardous waste sites—sites placed on the National Priorities List (NPL)—have been cleaned up.⁹ To clean up the remaining sites already on the NPL will cost the EPA alone an estimated \$40 billion. A similar amount is estimated to be spent for state sites. If the cost of cleaning up federal facilities is added to the equation, the total could exceed \$750 billion, or about \$7,800 per household.¹⁰

SUPERFUND'S FUNDAMENTAL FLAWS

Superfund's combination of heavy cost and modest impact results from four fundamental problems with CERCLA:

- ① As written, the law is designed to reduce the level of chemicals in the ground, not reduce risks to people;
- ② The program's unreasonable standards require that hazardous waste sites be cleaned up to a pristine level no matter what the location, resulting in a poor return on the investment;
- ③ Hazardous wastes by their very nature are local problems, but listings, cleanup decisions, and program authority are run by the federal bureaucracy; and
- ④ The law's retroactive, strict, joint and several liability scheme results in endless legal battles as potentially liable parties fight EPA, then each other, and then their insurers to shoulder the costs of cleanup.

Each of these characteristics drives up costs while blunting the program's effectiveness. The reauthorization legislation must correct these flaws.

Flaw #1: Cleaning up chemicals takes priority over protecting health.

The most important question that should be asked in the reauthorization process typically has not been asked in Superfund debates: What should be the basic intent of the law? CERCLA was enacted amid fears that some Americans were at risk from hazardous wastes. Yet the law was not designed specifically to reduce risk to the public. Rather, the goal was cleaning up spilled chemicals.

⁸ Estimates for non-government expenditures are in the range of \$15 billion.

⁹ *Federal Register*, April 25, 1995, p. 20330.

¹⁰ Kent Jeffreys, “Science, Economics, and Environmental Policy: A Critical Examination,” Alexis de Tocqueville Institution, Arlington, Virginia, August 11, 1994, citing Milton Russell *et al.*, *Hazardous Waste Remediation*. The author calculated the potential average household cost by dividing the total number of households in the United States in 1992, or 96.391 million, according to the U.S. Department of Commerce, Bureau of the Census, Current Population Reports, “Money Income in Households, Families, and Persons in the United States: 1992.”

To be sure, cleaning up chemicals does help protect public health if the sites being cleaned would expose the public to real risks. But if there is no threat of risk to the public—and there would be none without a land use change—then money is squandered that could have been used elsewhere to save more lives. Policymakers must take into account such “opportunity costs” of spending decisions. As Heritage analysts have noted, “Policy makers generally fail to recognize the simple truth that using resources one way means not using them in other ways that could yield better results.... [T]hey ignore the benefits, including much greater possible reductions in risks to individuals, that could be achieved by using these resources for some other purpose.”¹¹

From a public health perspective, poor choices are made routinely in the Superfund program. According to the Office of Technology Assessment, the listing of most Superfund sites is based on hypothetical rather than actual or likely future risks.¹² Economists Kip Viscusi and James Hamilton found similar results.¹³ Their study found that hypothetical potential future risks account for 90 percent of “risk-weighted pathways” at Superfund sites. For one-third of the sites studied, there is no current risk but only future risks. Moreover, for most of these hypothetical future risks, future generations would be at risk only if homes are built on sites that are not currently residential.¹⁴

While it would seem prudent to protect against such potential occurrences as the likely loss of clean aquifers or threats to human health, actions to avoid hypothetical threats to life should not have the same claim on already scarce resources.¹⁵ Unfortunately, because Superfund is designed principally to clean up chemicals, the program costs a great deal but achieves little improvement in public health.¹⁶

Flaw #2: Overly stringent cleanup standards divert resources from more effective uses.

The extremely high cost of cleanup is closely related to the question of reducing risk. For the average site, the estimated cost is about \$25 million, even though, as a category, hazardous waste sites are considered by EPA to be a medium to low health risk.¹⁷ The cost is so unnecessarily high because of overly stringent and inflexible cleanup standards for hazardous waste sites.

-
- 11 John Shanahan and Adam Thierer, “Can We Save Even More Lives? Understanding the ‘Opportunity Costs’ of Regulation,” Heritage Foundation *F.Y.I.*, February 28, 1994.
 - 12 “Coming Clean: Superfund Problems Can Be Solved...,” Office of Technology Assessment, October 1989. Others also have identified this problem.
 - 13 W. Kip Viscusi and James T. Hamilton, “Human Health Risk Assessments for Superfund,” *Ecology Law Quarterly*, August, 1994, pp. 574-641; W. Kip Viscusi and James T. Hamilton, “Superfund and Real Risks,” *The American Enterprise*, Vol. 5, No. 2 (March/April 1994), pp. 36-45.
 - 14 One low-cost solution would be to not allow residences to be built on these properties until the sites were cleaned up.
 - 15 For in-depth discussion of these issues, see Steven Milloy, *A Piece of the Superfund Puzzle*, National Environmental Policy Institute, June 1995; see also Milton Russell “Contamination or Risk: Cost Implications of Alternative Superfund Configurations,” presented at a meeting of the American Economics Association, January 7, 1995.
 - 16 The exception to this comment would be the emergency removal program, which does reduce unacceptable risk quickly and comparatively cheaply.
 - 17 Letter to Hon. Carol M. Browner from Representatives John D. Dingell and Al Swift, July 19, 1993.

In addition to requiring expensive cleanups of sites that pose little or no risk to the public, the standards require that sites posing a real risk be cleaned up to a level that goes beyond what is needed to reduce the risk to acceptable levels. For instance, polluted soil at industrial park sites must be cleaned up to a level that makes it essentially clean enough to eat. But while children may ingest contaminated dirt accidentally, or even purposefully, few are likely to be found playing in the dirt at an industrial park.

Cleanup standards should reflect the real risk to a person likely to be found at the site based on expected exposure, not on some hypothetical and very unlikely scenario. An industrial park does not need to be as pristine as a playground.

In other instances, no risk exists unless there is some change in how the land is used.¹⁸ Often, the owners have no plans for development or other change in current use. Yet rather than simply require a deed restriction that forbids change unless the site is cleaned up to a level appropriate for any proposed change in use, the Superfund program requires the PRP to clean up the site even if it poses no real risk as currently used.

Real risks also are not addressed in the most cost-effective manner. For instance, CERCLA's preference for permanent cleanup, as opposed to ongoing treatment or containment, drives up costs for remediation by discouraging containment and isolation. Blanketing layers of plastic and clay on the soil, surrounding the property with a fence, and posting guards might eliminate exposure to the public for a small fraction of the cost of remediation. But this option usually is not used.

Moreover, Superfund is structured so that states have a strong incentive to demand unnecessarily strict cleanup standards. States pay only 10 percent of remedial construction costs at fund-led sites, but the law requires them to pay 100 percent of the Operation and Maintenance (O&M) costs of such Superfund sites. Even though periodic, ongoing treatment may be cheaper and may reduce public exposure equally well, therefore, the states have a built-in incentive to demand one-time, permanent, and extremely strict cleanup standards so they can avoid future O&M costs. Meanwhile, companies responsible for paying for cleanup needlessly pay more.

Flaw #3: The law does not permit local problems to be handled locally.

Perhaps the most puzzling feature of Superfund is that it is a federal program. Indeed, CERCLA is not delegated to the states, unlike all other major environmental laws. But hazardous waste sites are, at their core, a local problem. If there is any federal environmental law for which a legitimate case can be made for devolving authority back to the states, it is CERCLA. Contrary to the usual argument put forth by those who oppose shifting to state jurisdiction—that states cannot be trusted to protect their population—state and local officials are far more accountable for local risks under their control than are distant federal officials. It is highly unlikely that states would neglect public health and safety concerns, especially given the general awareness and level of knowledge that exist today.

¹⁸ Technically, there is no such thing as zero risk, since a negative cannot be proven. For purposes of this study, negligible risks are discussed as posing, in practice, no risk.

To deal with any possible problems associated with devolution, certain safeguards could be built into the system. For instance, emergency removals that target sites posing immediate and substantial risks could continue at the federal level. Since the EPA has extensive experience and is relatively efficient at emergency response to sites that are truly hazardous, it could maintain the capacity to conduct emergency responses. This is not to say that the EPA emergency program is without its critics, but experience with this program generally has been better than with other parts of Superfund. Of course, safeguards would be needed to prevent abuse of what constitutes an emergency and to curtail the well-known problem of “bureaucratic creep.”

There is another very important reason for returning authority over hazardous waste sites to the states: The Tenth Amendment to the Constitution reserves to the states all powers not explicitly granted to the federal government. The federal government should assume responsibility only for issues that are national in scope and interest. Federal involvement in the cleanup of local hazardous waste sites does not meet this standard. In fact, it is hard to imagine anything better suited to the exercise of state leadership and authority than local problems associated with the cleanup of hazardous waste sites.

Flaw #4: The determination of liability leads to endless legal battles.

One of the most damning, though inaccurate, criticisms of Superfund is that 80 percent of the money has gone to lawyers rather than for cleanup. This figure, commonly cited in the press, overstates the litigation costs severalfold, but the substance of the criticism is correct: Superfund’s liability scheme encourages litigation and other transaction costs. Further, it has led to numerous “horror stories” of individual citizens and small businesses subjected to millions of dollars in potential liability for what most people would consider innocent acts, some of them committed generations ago. For instance, Russ Zimmer was named a PRP for a Superfund site at a battery cracking plant in Torrington, Wyoming. His contribution to the problem? He sold a bag of dog food in 1977 and a bag of seed in 1984, and took a third-party check as payment for the items. Since the checks had been issued by the now-bankrupt company that had owned the battery cracking plant, Zimmer was sued as a PRP by another company caught in CERCLA’s liability scheme. Zimmer decided, on advice of counsel, that he should settle to avoid even more in legal costs. He agreed to pay \$3,500.¹⁹

One of the major causes of such legal woes is the concept of joint and several liability, under which even minor contributors to a problem (for example, someone who tosses a car battery into a landfill) can be held responsible for the entire multi-million dollar cost of cleanup.²⁰

The concept is designed to find somebody—anybody—to pay for cleanup of hazardous waste, even if the “responsible” person has only a tiny part in creating the waste problem. In practice, this means that a firm with “deep pockets” ends up paying for the cleanup of wastes created by someone else. Naturally, any person or institution identified

¹⁹ Jack Anderson and Michael Binstein, “How Superfund Hurt the Innocent,” *The Washington Post*, March 7, 1994, p. C11.

²⁰ Special rules apply now to very small (*de minimis*) contributors, but the problem discussed nevertheless still exists for many small, as well as moderate, contributors.

as a PRP has a strong incentive to show that others are liable as well, in order to spread the costs among more PRPs. Litigation is virtually assured.

Faced with large and uncertain liability, PRPs typically protect themselves by hiring lawyers. Thus, rather than quick payments from “polluters,” the liability scheme encourages legal gridlock, cleanup delay, and enormous legal costs. A recent report estimated total government, PRP, and insurer transaction costs of about \$1.3 billion at NPL sites.²¹ Although EPA Administrator Carol Browner has admitted the need for reform, she also claims that “a lot of good has come from the program. The polluter-pays concept that was first adopted in the Superfund law has changed the way businesses deal with their waste.” But, Superfund does not adopt the “polluter-pays” system. Joint and several liability merely guarantees that people like Russ Zimmer pay for cleanup instead of those who are really responsible. In short, it works against the idea of making polluters pay the costs that their actions impose on others.²²

Perhaps the most controversial part of the liability scheme is its retroactivity.²³ Retroactive liability means that owners, operators, and other individuals and companies otherwise liable under the strict, joint and several standards are held responsible for pollution that took place before it became illegal. For example, a company could be held liable for any pollution that occurred before the Superfund law was passed in 1980. If a company made jeep parts during World War II, and during production some chemicals seeped into the ground, it would be legally responsible for cleaning up those chemicals today—even though the manufacturing activity was legal at the time. Because of a law passed more than 35 years later, the company may face tens of millions of dollars in cleanup costs.²⁴

While retroactive liability is considered by many to be a violation of the Constitution’s prohibition that “No... ex post facto Laws shall be passed,” it also is simply unfair. Under the law as enforced, for instance, a farmer may find that his grandfather—or even some intervening owner of whom he has never heard—fouled the sub-soil 50 years earlier using then state-of-the-art equipment. The farmer must fix the entire problem, no matter how much it costs. But if he caused the problem himself back in the 1960s, how could he be expected to know that his actions—considered legal and reasonable at the time—might destroy his children’s inheritance of the family farm? Both environmental sensitivity and environmental knowledge have increased exponentially since that time.

Retroactive liability has triggered an avalanche of litigation which probably is the biggest contributor to Superfund’s failure to achieve its primary objective of cleaning hazardous waste sites. Perhaps the most important practical problem is that retroactive liability increases the number of PRPs for any given site. Numerous individuals and companies may have owned the land over the decades, each owner typically dealing with others who might also be considered liable. Since many owners and other potentially liable parties

21 National Strategies, Inc., *The Costs of Superfund: A Financial Analysis*, May 1995.

22 For an elucidation of the principle as properly defined, see John Shanahan, “The Conservative As Environmentalist,” *Heritage Lecture* No. 358, November 19, 1991.

23 Retroactive liability is not expressly provided for in the text of CERCLA, but it is clear from the usage of the past tense that Congress intended it to be retroactive. Moreover, the courts have interpreted that the intent of the law was to impose retroactive liability.

24 For many defense contractors, liability has amounted to hundreds of millions of dollars.

have poor records—or no records at all for activities several decades ago—it is little wonder that those already targeted by the EPA challenge EPA about the remedies selected to keep costs down, pursue other PRPs to spread costs, and sue insurers to recover costs under old policies.

In all, transaction costs account for approximately \$1.3 billion annually from all sources. According to the Rand Institute for Civil Justice, the average cost for PRPs varies from 17 percent to 60 percent depending on the size of the party held liable.²⁵ Reform of the Superfund program, however, should eliminate most of these huge transaction costs.

CRAFTING A PROGRAM THAT WORKS

The political key to real reform is to end the infighting between industry sectors over which will win and which will lose with changes in the law. The focus should be on benefiting all government industry sectors so that, even if the mix of benefits is uneven, the least benefited sector or company is substantially better off under the new law. And to encourage states to accept responsibility for the program, a state fund should be created that is sufficiently attractive to motivate them to extend these reforms beyond National Priorities List sites to high risk state sites.

An effective Superfund reform proposal should increase fairness, accelerate cleanups, reduce costs across the board, and more fully protect the public from real risks. It also should reduce costs so that no tax increase is necessary to fund the new Superfund law—even though retroactive liability would be eliminated for waste disposal at NPL sites before 1987.

Congress can accomplish these objectives by incorporating certain features into this year's reauthorization legislation:

1) States should have authority over current NPL sites and responsibility for “orphaned” sites — with funding.

Rather than have the federal government clean up sites for which no one else is liable, state governments should be responsible for these costs. These sites, by their very nature, are local problems. Moreover, state governments likely are far more efficient than EPA in conducting cleanups.

A revolving loan fund—or direct payment fund—should pay for most of the projected cleanup costs transferred to the states. Initially, the federal share could be perhaps 90 percent, to be scaled down over time. A revolving loan would constrain the natural tendency to require that sites be restored to pristine conditions. A higher state share, however, likely would have the same beneficial effect.

25 Jan Paul Acton and Lloyd S. Dixon, with Deborah Drezner, Laural Hill, and Steven McKenney, *Superfund and Transaction Costs: The Experience of Insurers and Very Large Industrial Firms* (Santa Monica, Cal: Rand Institute for Civil Justice, 1992). Rand estimates an average site cost of \$32 million .

States should be allowed to dedicate the funds to any of their most serious hazardous waste sites, not just NPL sites transferred from the federal government. The condition would be that they enact the changes specified below, the most important being that they prioritize sites without regard to who is liable for cleanup and spend the funds according to that prioritization. Moreover, they should not use retroactive liability for financing at those sites where federal funds are used. They could continue, of course, to use any liability system they chose for other sites. This would encourage flexibility and prioritization of cleanup. It would also help states reach what should be their main objective: reducing health-threatening risks to their citizens as effectively and comprehensively as possible.

A revolving loan fund also should be available for cleaning up old industrial sites. Typically, businesses are disinclined to locate at abandoned industrial sites—or brownfields—because of their legitimate fear of having to bear the cost of cleaning up hazardous wastes they did not create. So they tend to locate their new facilities in greenfield sites that have had no previous industrial activity. This neither makes economic nor environmental sense. For sites not currently on the NPL, states could use the revolving fund to encourage development whenever the need for cleanup causes the land to have a negative worth. In addition, EPA should be prohibited from second-guessing state remedy and liability decisions at such sites.

2) EPA should retain emergency cleanup capacity.

Since the EPA is both experienced and relatively efficient at emergency response to truly hazardous waste problems, it should maintain the capacity to conduct emergency responses. To prevent abuses, each state would have the authority to decide whether a site constitutes an emergency. Either the state or a liable PRP would be required to pay for such cleanups through a cost recovery action.

3) Standards for cleanup should be determined by the states, limited only by certain provisions of law that each state would be required to adopt to qualify for funding.

Remedy and site selection standards generally should be left to the states.

The states would have to agree, however, to prioritize sites according to their real risk of human exposure, and to prioritize spending based on the most risk reduced for every dollar spent. This would give them the “biggest bang for the buck” in protecting public health.

The states would be required to not use retroactive liability (discussed in the following section) for all sites for which federal funding is provided. Otherwise, they would have an incentive to transfer costs to the private sector.

The states should be allowed to spend the new funds on cleanup of non-NPL sites, provided they agree to extend the new liability standards to that class of sites.

Adopting flexible performance standards and other remedy selection changes would mean enormous savings on the cleanup portion of total costs. Cost savings of 35 percent typically are estimated by industry, although some experts believe the real savings could be twice this amount. Adoption of these standards, however, should not be made a condition of funding; responsibility for cleanup costs without the use of retroactive liability, combined with the funding condition of site prioritization, would encourage state flexibility without specific standards.

4) Reform the liability system.

A more rational standard for assessing liability would:

Eliminate joint and several liability. The courts generally have interpreted CERCLA to mean that anyone who has even a slight interaction with the site is liable for the whole cleanup cost. This creates a situation where a person or company whose actions caused little or no harm can be pursued for the whole cost of cleanup. Reform would make clear that liability is not joint and several, but instead proportional to a PRP's contribution. This would send the right economic and behavioral signals to the market, and liability would harness rather than fight market forces. For the first time, the "polluter pays" principle actually would be put into practice.

Repeal retroactive liability. Retroactive liability makes people or firms responsible for activities that took place in the past when they were legal. Thus, for instance, a landowner is responsible for cleanup of hazardous waste created at the turn of the century by a previous owner. While the U.S. Supreme Court has not found that retroactive liability violates the Constitution's prohibition of ex post facto laws, holding people liable for actions taken before 1980 is patently unfair to those caught in its web and contrary to American notions of justice. Moreover, it is largely unnecessary. Repeal of retroactive liability, however, need not interfere with a private party's rights to sue for damages. Under the common law, if an action causes harm to a neighboring property, or a party contributes to a public nuisance, the party is liable under tort.

The date before which no liability would exist could either be 1981, when the original Act took effect, or 1987, when substantial changes took effect. Even though the fairness argument is not as obviously compelling for disposals before 1987 as it is for disposals before 1981, 1987 is preferable for a number of reasons. The most important is that CERCLA is only a liability statute. It does not set rules for disposal. That is done by RCRA and other laws. These laws primarily took effect or were modified from 1980 through 1986. For example, RCRA's disposal and record keeping rules were extended to 175,000 more entities in 1986. Unfortunately, many, if not most, companies reasonably believed or were legally advised that if they were in compliance with RCRA and the other laws, they could continue their disposal practices. Yet these same companies are now liable under CERCLA for their innocent conduct. The 1987 date also is preferable for the sake of efficiency and lowering society's total CERCLA cost burden. Until 1987, disposal rules for all parties were not clear and records under CERCLA are scanty. If the 1981 date is adopted, protracted court battles and slow cleanups would remain at a large number of sites. State governments—with funding—would become responsible for cleanup of old "orphan" sites where PRPs are not liable under the new standard.

Exempt remediation firms and trustees from liability in the absence of gross negligence or willful neglect. These firms can become liable for problems associated with cleanup, making it difficult to find quality "construction" firms willing to assume the risk of cleaning up problems caused by others. While these firms should be exempt from strict liability as a matter of law (using the common law standard of gross negligence and willful misconduct), PRPs also should be allowed to contract a greater degree of liability to those cleanup firms willing to take the additional risk for higher pay.

WHO SHOULD PAY?

One of the most contentious issues in the Superfund reform debate concerns who should pay for cleanups. If retroactive liability and joint and several liability are repealed, some level of government would become responsible for those newly “orphaned” sites where contamination occurred before the cutoff date—1987 under this proposal. For sites that the government cleaned up, the costs no longer would be borne by PRPs, but by the government entity—state government under this proposal—that decided the site ranked high enough to merit timely cleanup.

Since few states would rush to embrace reform that saddled them with hundreds of millions of dollars in additional costs, a federally supported state fund would seem reasonable if the program is devolved back to the states. Where would the federal government obtain this money, and how large a fund would be necessary?

Currently, the trust fund has about \$1.9 billion in annual revenue and a prior, unappropriated balance of about \$2.5 billion that is not obligated. This fund has been raised through a variety of mechanisms, including annual taxes on petroleum (\$557 million) and chemicals (\$250 million) and a Corporate Environmental Income Tax of \$653 million.²⁶ These taxes are set to expire at the end of 1995. In addition, Congress generally has appropriated \$250 million annually for Superfund, and federal agencies have significant PRP liability at these non-federal facility NPL sites.

Covering the expected additional costs to the states for accepting responsibility for this program will require more than the unappropriated amount currently in the trust fund. One solution would be to reauthorize collection of taxes at current levels for the next several years, after which a slow phaseout of the federal fund could begin. The costs to states should reduce over time in any event, since the number of NPL sites transferred to them would be fixed. But there is intense debate over whether current tax levels could finance cleanups with retroactive liability repeal for all current PRPs. The question is important because taxes are not likely to be raised. Nor should they be. Indeed, reform eventually should phase out taxes. But that does not preclude reexamining either the current mix of funding or the budgetary vehicle for collecting and spending this revenue stream.

Lawmakers should note that current Superfund taxes have been used to fund programs unrelated to Superfund. Funding substantive reform will require using these revenues to clean up hazardous waste sites. If the financial flows into and out of the fund are sustainable, the program should be able to “pay for itself,” and be treated as such in the budgetary process.²⁷

The financial implications of repealing retroactive liability and joint and several liability were analyzed by National Strategies, Inc. (NSI).²⁸ The Barents Group of Peat Marwick, which reviewed the study independently, found the analysis to be “carefully

²⁶ NSI, *The Costs of Superfund: A Financial Analysis*.

²⁷ Budgetary barriers such as “pay go” should be avoided. Since taxes expire at the end of the year, future revenues should be raised as user fees applied primarily to industries which have generated pollution. Not only would this be more consistent with the original reason for raising revenues from corporations—to finance the cleanup of problems caused by their industries—but it would avoid unnecessary and arbitrary budgetary barriers that would threaten reform.

conducted, well documented, and to represent a fair assessment of the financial flows....”²⁹ NSI’s conclusions help make the case for a substantive overhaul of Superfund.

One of the NSI report’s key conclusions is that repeal of retroactive liability for waste disposal that occurred before 1987 is achievable with the current revenue stream without using the unappropriated \$2.5 billion currently in the trust fund. The main reason is that significant inefficiencies would be eliminated through reform.³⁰ The report does not factor in the substantial benefits to be realized through risk prioritization or remedy selection improvements. Savings estimates vary from about 25-70 percent of cleanup costs, but even the more conservative estimates indicate that the amount would be significant. These savings, as well as about \$2.5 billion now in the fund, could be used for other purposes, such as a revolving loan fund for cleanup of state sites that are not on the federal NPL list.

The NSI report’s financial conclusions suggest that, far from being saddled with additional costs, states could be given access to a loan fund for addressing waste sites now handled and financed solely at the state level, since the current fund and expected future savings not factored into the report would create a significant pool of funds.³¹ Under the proposal here, the only strings attached to the funds would be that states would have to prioritize state sites according to risk and not use their onerous liability laws, if applicable, for the sites high on the list for which federal funds would be provided. Put another way, no funds could be used for sites lower on the priority list unless retroactive, joint and several liability is not applied to sites higher on the list.³² A revolving loan fund would be available for cleaning up old industrial sites as well.³³

28 NSI, *The Costs of Superfund: A Financial Analysis*.

29 Barents Group of Peat Marwick, “Review of the National Strategies, Inc. Report: *The Costs of Superfund: A Financial Analysis*,” June 13, 1995.

30 For instance, repealing the liability scheme as well as devolving authority back to the states would mean shifting the costs of cleanup to the government, but savings from this shift also would occur. With repeal of retroactive, joint and several liability for pre-1987 sites, PRPs could expect to save \$1.8 billion per year, much of which would not be passed on to government because fully 32 percent of current expenditures—ranging from 17-60 percent depending on the size of the firm—are wasted on legal and other transaction costs. Yet the vast majority of these transaction costs would disappear since they are caused primarily by the liability scheme. Transaction costs amounting to hundreds of millions of dollars incurred by EPA and the Department of Justice could be reduced and redirected to cleanup. Similarly, other EPA overhead could be cut and redirected to cleanup.

31 The amount of anticipated savings could be withheld from the initial fund payments, which is not done now.

32 Some 40 states adopted CERCLA’s liability scheme.

33 The NSI analysis specifically assessed and compared the “financial flows” of Superfund under current law and a proposal crafted by Superfund ’95 (SR ’95), a coalition of 600 local governments, small and large businesses, and insurers. The NSI report simply examines the financial flow of implications of repealing joint and several liability and retroactive liability prior to 1987, but its financial analysis supports the more dramatic reforms proposed here because the costs identified would decrease substantially after a few years with remedy selection reform. However, the costs under SR ’95 and the Heritage Foundation approach would not differ significantly since both propose repeal of the liability scheme, which is a driving cost factor, in addition to sharing some other key components. Indeed, the proposal here should be less costly.

Although the level of funding required to support reform would depend largely on its structure, the total needed to implement fully the recommendations outlined in this paper would be around \$2 billion annually. After several years, however, taxes or user fees could be reduced to reflect anticipated savings. It is critical that Congress appropriate to the reformed program all Superfund tax revenue, the current general revenues appropriation, and at least the annual interest on the current unappropriated trust fund balance.

CONCLUSION

Superfund is broken. If it is to be repaired, it must be completely overhauled. Federal agencies, state governments, municipalities, and the private sector must be relieved of the ill-conceived, unnecessary, and expensive burdens of the program. Specifically, the reformed CERCLA should at least:

- ① **Turn authority for current NPL sites over to the states — with the necessary funding.** To qualify for funds, states should be required to meet two conditions.
 - ☞ Prioritize sites and expenditures based on real risks.
 - ☞ Eliminate joint and several liability completely and retroactive liability for wastes disposed of before 1987 for sites cleaned with federal funds.
- ② **Allow states to use funds for any of their most serious hazardous waste sites, not just NPL sites transferred from the federal government.** These conditions would have to apply, or states would be tempted simply to spend the money on sites for which they were responsible rather than on those that are most dangerous.
- ③ **Create a revolving loan fund for cleaning up old industrial sites.**
- ④ **Allow EPA to retain emergency cleanup capacity.**

If substantive reforms of this nature are not enacted, Superfund will continue to be an ineffective and expensive drain on the American economy. But if proper reforms are instituted, Congress can achieve its original goal of protecting Americans from hazardous wastes at reasonable cost.

John Shanahan
Policy Analyst