Policy Analysis

Cato Institute Policy Analysis No. 89: The Real Superfund Scandal

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Executive Summary

Superfund has failed to safeguard the nation's environment. After close to seven years, fewer than 20 hazardous waste sites have been fully cleaned up, and many of those are reportedly still leaking. The nation's premier environmental program is largely a move-a-dump-a-day shuffle, a merry-go-round for hazardous wastes. And, according to one government report, most of the disposal sites that have received waste from Superfund sites also pose serious health threats--meaning that Superfund has accomplished little or nothing.[1]

Much of the government's Superfund budget has been spent on self-defeating and unjust litigation and shoddy, repetitive feasibility studies on the possibilities for cleanup. As a result of the government's litigation strategies, corporations choose to drag out court battles forever. As a result of its low-quality research and analysis, the Environmental Protection Agency (EPA) has little or no idea what it is doing. Yet in the 1986 reauthorization and expansion of Superfund, Congress and the Reagan administration paid little attention to the program's inherent defects.

In many ways, Superfund has made the environment a more dangerous place. Fear of unlimited liability has scared off private businesses from doing voluntary cleanups. An atmosphere of public hysteria that EPA has sometimes stirred up intentionally has created a nationwide NIMBY (not-in-my-back-yard) response that is causing a dangerous shortage of disposal sites for currently generated hazardous waste. Worst of all, perhaps we have wasted time that could have been used to effectively address the real hazards presented by abandoned hazardous waste dumps.

Even though Superfund has been plagued with problems and many experts have expressed grave doubts about its effectuality, last year Congress reauthorized the program and increased its five-year budget fivefold, from $1.6 billion to over $9 billion. Yet much of the new program is designed, instead of for solving serious threats, for providing photo opportunities for politicians.

The Beginning

Love Canal is the father of Superfund. An abandoned chemical dump site near Niagara Falls, New York--which the Hooker Chemical Company had warned local governments and developers not to build residences on--Love Canal began to leak chemicals in the late 1970s, giving rise to widespread fear about hazardous wastes. Top EPA officials went to the site, called an emergency press conference, and created an atmosphere of panic.

In the news coverage at the time, it was taken as self- evident that chemical wastes had done serious health damage to nearby residents. But a panel of scientists working for the state of New York concluded in late 1980 that "there has been no demonstration of acute health effects linked to exposure to hazardous wastes at the Love Canal site."[2] An

article in Science magazine in June 1981 concluded that "data from the New York Cancer Registry show no evidence for higher cancer rates associated with residence near the Love Canal toxic waste burial site in comparison with the entire state outside of New York City."[3] Later reports by the Centers for Disease Control found no excess illnesses among persons living close to Love Canal and no increase in the frequency of chromosomal abnormalities.[4]

Largely in response to public concern about Love Canal, Congress in 1980 passed the Comprehensive Environmental Reclamation and Cleanup Act (CERCLA), popularly known as Superfund. Superfund was given a budget of $1.6 billion to address toxic waste problems in the following five years.

Love Canal has long been a popular benchmark for Superfund. When people talk of the National Priority List (NPL)--the list of hazardous waste sites targeted for expedited treatment, federal cleanup funding, and extensive remedial investigation and feasibility studies--they think of it as listing hundreds of potential Love Canals. When people hear congressmen warn of "toxic time bombs" scattered everywhere, they get the impression that a potential Love Canal is around every corner.

But Love Canal has little in common with most NPL sites. Superfund was initially justified as a federal response to abandoned hazardous waste sites, such as Love Canal. Subsequently, though, other kinds of waste sites have been added to the list. As a result, the NPL is now full of air force bases, currently operating factories, and municipal landfills. Of the 244 additional sites proposed for the NPL in 1984, very few are actually abandoned, or "orphan," sites for which no "private responsible party" (PRP) could be found. Furthermore, in the official hazard ranking system that EPA devised to rank the priority of cleanup sites, no mention is made of whether sites are abandoned, currently in operation, or owned by the federal government.

Superfund as Pork Barrel

The original Superfund law specified that EPA must find "at least 400" sites for the NPL. Four hundred was a nice round number--roughly equivalent to the number of congressional districts. The original bill also specified that every state was entitled to at least one hazardous waste site worthy of cleanup at federal expense, thereby allowing all the legislators to take credit for protecting their constituents from toxic wastes.

To produce 400 winners, EPA set a cutoff of 28.5 on a scale of 1 to 100, with 1 being the least hazardous and 100 the most hazardous. EPA arbitrarily weights various factors to achieve a cumulative score for each site. The number 28.5 has no objective significance. It was chosen simply to provide a list of 400 sites. But that number has tended to become enshrined as the key to a clean environment, and it could dominate cleanup decisions for the rest of the decade.

There are now 850 sites on the NPL. Taking "national priority" literally, it is difficult to understand how many of those sites made the list. Consider the following examples:

-- Boston, Massachusetts. Superfund is now paying to dig up the dirt around old houses in low-income neighborhoods. Why? Because the dirt has a high lead content as a result of paint chipping off the houses for decades. How is that a national health threat? If poor children eat the dirt, they will get sick.[5]

-- North-U Drive site, Springfield, Missouri. A state investigation found seven private wells with water that had chemical tastes and odors. The Green County civil defense agency is trucking in water for about 20 households.[6] Why is the contamination of the water supply of 20 families designated a national priority?

-- Lacks Industries, Inc., Grand Rapids, Michigan.

Lacks Industries, Inc. operates plating, die-casting and painting facilities. . . . Wastes were deposited in the unlined lagoons, each covering about a quarter of an acre. . . . The major concern is potential contamination of private drinking water wells, although sampling in May and June of 1984 by Kent County showed no contamination. About 300 people within three miles of the site use groundwater as a source of drinking water.[7]

Why is this a national priority? A currently operating private company dumped some wastes, but there is no sign of water contamination; even if there were, a very small number of people would be affected.

-- South Macomb Disposal Authority, Macomb Township, Michigan. The South Macomb Disposal Authority was a municipal landfill that accepted trash and possibly industrial wastes.[8] Two residential wells in the area have been contaminated with zinc, a chemical not highly toxic to humans. Why is the contamination of two residential wells a national priority?

-- Torch Lake, Houghton County, Michigan. Copper-mining companies dumped tailings into Torch Lake in the Upper Peninsula of Michigan for almost a century. "Cancerous growth has been documented in two fish species, and the public Health Department has issued a health advisory on fish consumption."[9] Given that the average Superfund site cleanup costs $8 million, it would be cheaper to give every fisherman in the neighborhood a gold-plated fishing rod than to clean the lake. Besides, dredging the lake will probably kill more fish than simply leaving the lake undisturbed.

-- Windom city dump, Windom, Minnesota. Before it was closed in 1974, this city dump accepted trash and industrial wastes for almost 20 years. Not surprisingly, on-site wells are contaminated with organic chemicals. As EPA noted, however, "To date, municipal and residential wells are not contaminated. The municipal wells continue to be sampled by the city and the state."[10] It is not surprising that the ground right below a city dump is tainted, but there is apparently no groundwater contamination in this case. Why is this site a national priority? And what reason is there for adding the Windom dump to the NPL that would not justify adding every city dump in the nation? Obviously, the main attraction of cases such as Windom is that the federal government will pay half of all costs for cleanup and investigation.

-- Triangle Chemical Company, Bridge City, Texas. Triangle Chemical Company went bankrupt in 1981 and left 900 drums and several large tanks of hazardous substances on site. EPA went in, fenced off the area, carted off the drums, and sued the company for damages.[11] Since there was no groundwater or other major contamination at the site, it is difficult to see how Triangle Chemical Company could be added to the list without implicitly qualifying every unclaimed barrel of chemical residue in the country.

-- Friedman site, Upper Freehold, New Jersey. This ditch in Upper Freehold was rumored to have been used for illegal dumping of hazardous wastes in the 1950s and the 1960s. EPA added it to the list on the basis of those rumors but after two years and hundreds of thousands of dollars spent on investigations had failed to detect any sign of hazardous wastes dumping.[12]

A few of the sites that have been "cleaned up" also raise doubts about the rigor of the NPL.

In Saipan, in the northern Marianas, for example, EPA discovered a warehouse containing 21 drums of transformer oil contaminated with polychlorinated biphenyl (PCB). Even though there was no contamination at the site, the warehouse was ranked 100th on the NPL. EPA simply shipped the barrels to an incinerator, where they were burned. Likewise, another NPL site in the U.S. Trust Territory of the Pacific Islands consisted of seven locations at which PCBs, pesticides, and chemical wastes were stored. Only one of the locations was contaminated, and even there the contamination was not extensive. The site was delisted after EPA shipped the wastes back to the United States for disposal.[13]

A third example from the Pacific: at Taputimu Farm, an experimental agricultural station in American Samoa owned by the territorial government, approximately 400 pounds of chemical and pesticide wastes were found improperly stored in a warehouse. The wastes were shipped to the United States for disposal, and the farm buildings were decontaminated. The Taputimu Farm site was ranked 88th on the NPL. This case suggests that every kitchen treated with anticockroach spray would qualify for inclusion on the NPL. At Taputimu, a building used for chemical storage was prohibited from being used for food storage.[14] Is the situation really worthy of a national emergency response?

EPA's hazard ranking system (HRS)--the foundation of Superfund--is arbitrary and often misleading. A study by TRC Environmental Consultants found that a site's HRS score "is almost entirely determined by the amount of information available about a site (particularly measurements) and how many people live near a site than by any real measure of risk."[15] The congressional Office of Technology Assessment observed, "The score for hazard potential is based on only the most hazardous substance in the site rather than a composite of all constituents. In contrast, all substances are used to quantify the magnitude of the hazard."[16] As Joel Hirschhorn of OTA concluded, "The ranking system is only

very loosely related to the actual severity of the problems at the sites."[17]

If there were a thousand barrels of industrial waste at a site and one of them contained PCBs, the site would qualify for the NPL. And EPA could spend a million dollars studying the whole site instead of simply hauling off the limited hazardous material.

Clearly, NPL standards are not very rigorous. Even worse, perhaps, is the fact that there has been no consideration of whether a site is actually abandoned. The original intent of the Superfund Act has been almost totally disregarded. Forty- five military bases are now included on the NPL.[18]

Even more surprising--considering Superfund's public image of seeking out abandoned, unknown sites--is the number of currently active factory sites. In California alone, the proposed NPL sites included two separate Fairchild camera plants, a Firestone Tire and Rubber Company plant, an FMC Corporation plant, a Hewlett-Packard plant, two Intel Corporation plants, and an IBM plant.

One way to understand the arbitrariness of EPA's hazard ranking system--and how Superfund spending has soared while having little salutary effect on the environment--is to examine one site in depth. The Lansdowne radon house is a duplex dwelling at 105 and 107 East Stratler Street in Lansdowne, Pennsylvania. From the 1920s to the 1940s, a professor produced radon in the house's basement. In the 1960s, the site was "the subject of an intensive multi-agency radium decontamination demonstration project," according to EPA. The commonwealth of Pennsylvania and the U.S. Air Force conducted a joint cleanup "using 'state of the art' technology at that time in order to reduce contamination to levels which at the time were considered to be acceptable."[19]

EPA rechecked the house in 1984 and found radiation levels above the general-population risk level. A cleanup project estimated at $114,000 was planned, and it included the temporary relocation and temporary storage of furnishings of the two elderly widows who lived in the duplex. Originally, the Lansdowne site was found not eligible for the NPL because of a low hazardous ranking. As the EPA "List of Proposed Sites for the National Priority List" concluded, "No environmentally sensitive areas near the site have been identified."[20]

In a later report, EPA seemed almost eager to find a problem. On the official reporting form, under the heading of "Increased threat to human health or environment if action is delayed or denied,"[21] EPA warned, "Radon gas levels will increase during fall, winter, and spring months when the house is closed up." Although radon can be toxic, residences can usually be made safer simply by providing ample ventilation. But the EPA report declared that the main danger in the Lansdowne house was that when the windows were shut, the radon gas would not escape.

In its official press release announcing the house's 1985 inclusion on the NPL, EPA warned, "The surrounding area is a suburban residential setting which could be affected should the structure catch fire and spread contamination via the smoke plume."[22] After extensive discussions and consultation, a "consensus" was reached "that EPA implement and/or install fire suppression equipment [i.e., a fire alarm and a sprinkler] to minimize any potential threat from a fire at the Lansdowne house."[23]

Once the house reached the NPL, the estimated project cost increased twentyfold, to $3.5 million. EPA planned to buy the house for a generous price, spend six months dismantling the building and excavating the grounds, pay the Department of Energy $400,000 to monitor the work and sample the dirt (it is difficult to understand why so much sampling was necessary, since EPA already knew the source and nature of the contamination), and spend $150,000 to ship 300 cubic yards of contaminated waste almost 3,000 miles to Washington State for disposal.

It is useful to go back to EPA's original memorandum, which had warned, "Occupancy of this building for residential or commercial purposes will constitute a significant health risk."[24] Could EPA not have simply warned the two elderly women and possibly even publicly condemned the house?

EPA is adding to the NPL six aquifers in Hawaii that had been contaminated by agricultural pesticides. This is another broad expansion of the NPL, and it makes little sense because there are few federal environmental regulations on the agricultural use of pesticides. As a recent report by EPA's Office of Groundwater Protection concluded, "Past monitoring for pesticides in groundwater has been minimal. Testing of pesticides for their potential to leach through

the soil has also been very limited."[25] If EPA adds pesticide-contaminated sites to the NPL, one government program will be continually trying to correct what other government regulatory agencies refuse to prevent.

Besides, it is inane to have EPA cleaning up agricultural runoff at the same time another federal agency--the Department of Justice's Drug Enforcement Administration--is vigorously spraying private and public land with deadly paraquat, which could contaminate water supplies at the same time it poisons marijuana users.

Superfund has been ineffective partly because it has degenerated into a wish list for environmentalists. They have continually pushed to expand Superfund's jurisdiction, and thus the program has paid less and less attention to its original purpose. As Fred Smith of the Competitive Enterprise Institute observed, environmentalists want Superfund to cover "everything except poison ivy."[26]

Superfund's Shaky Foundation

Last year, while government and private industry spent $8 billion on controlling and cleaning up hazardous wastes, EPA spent less than $50 million on studying the health dangers of toxic wastes.

According to the General Accounting Office (GAO), The Department of Health and Human Services was supposed to conduct health studies, laboratory projects and chemical testing to determine relations between exposure to toxic substances and illness. Except for one study at Love Canal begun before the Superfund Act was passed, no health studies or laboratory projects had been completed as of December 31, 1984. Although the Department of Health and Human Services had planned to complete testing of about 780 chemical combinations by September 30, 1983, as of December 31, 1984, tests involving nine chemicals had been started and two had been completed.[27]

Not a single NPL site has been analyzed by the Department of Health and Human Services (HHS) for health risks.

The original Superfund Act mandated the creation of a national registry of persons exposed to toxic substances and a national registry of serious diseases and illnesses. HHS did not even adopt criteria for establishing registers at Superfund sites. Eight years after Love Canal, HHS has a listing of people exposed to possible contamination at only one site.[28]

As GAO noted, "Establishing links between exposure to toxic chemicals and specific adverse health consequences involves rapidly changing technical and medical issues on which little scientific data has been developed."[29] Yet without this information, the whole cleanup program has little chance of success. EPA cannot intelligently set standards unless it knows what chemicals are toxic to humans and at what concentrations.

Private research suggests that Congress and EPA may be overestimating the toxic danger from some chemicals. According to a 1985 study by Universities Associated for Research and Education in Pathology, Inc., "There is little scientific evidence that chemical disposal sites have had serious effects on [the] health of populations living near them."[30]

And even if EPA did know what chemicals are toxic and at what concentrations, the minimal research on groundwater would make intelligent regulation difficult. Until EPA knows how chemicals are diffused among groundwater plumes, how long contaminants stay toxic, and how groundwater cleanses itself or can be cleansed, the Superfund regulations and cleanups will continue to be less than useful. A 1986 EPA draft policy analysis noted, "It is quite possible that the natural biodegradation process of the soil and groundwater can decompose wastes and make them harmless."[31]

Even though several laws have given EPA the right to monitor groundwater since the early 1970s, EPA and Congress have shown little interest in pollution that cannot be seen and pointed at above ground. EPA has had the authority to establish drinking-water standards and testing requirements for organic chemicals since 1972, but it did not issue any final standards until late 1985. During the early 1980s, the Department of the Interior's Geological Survey was probably spending more dollars per year on groundwater research than EPA.

Besides, it is difficult to see why maintenance of local groundwater should be a federal responsibility. GAO reported that of 15 states it surveyed in 1984, none "identified interstate [groundwater] aquifer problems."[32] Most states

oppose a federal regulatory role in setting groundwater standards, although they would be willing to accept federal funding for research and monitoring.

EPA, the Hanging Judge

EPA has intentionally disregarded equity and fairness in its prosecution of alleged Superfund site waste contributors. Congress deleted an explicit joint-and-several-liability provision in the final Superfund bill in 1980. In other words, Congress did not make it clear whether a company should be held liable for only what it contributed to an abandoned waste site or whether its mere presence at the scene of the crime was sufficient for full blame.

EPA has consistently interpreted the Superfund legislation to maximize its own arbitrary authority and minimize private companies' chances of avoiding conviction. One federal district judge criticized EPA's Superfund enforcement practices in a case before her as "an arrogance of power that is bureaucracy at its worst."[33]

EPA has chosen to use the joint-and-several-liability interpretation primarily because that gives it maximum intimidation power over corporate defendants. To allocate responsibility for the cost of the entire cleanup of a dump site, all EPA needs to prove is that a company contributed a single barrel of waste to the problem.

But EPA's efforts based on this interpretation have delayed cleanups, boosted legal costs, and generally discredited the Superfund program with corporate America. Joint and several liability has also helped deter private, voluntary cleanups.

EPA is not subtle about its disregard of equity. While testifying at congressional hearings on the reauthorization of Superfund, Lee Thomas, EPA administrator, admitted, "The fair share concept is one we have not found viable in trying to settle sites."[34] EPA's official policy manual states, "To achieve the agency's goal of obtaining 100% of cleanup or the cost of cleanup, it will be necessary in many cases to require a settlement contribution greater than the percentage weight contributed by each PRP to the site."[35] According to official EPA policy, "Apportionment issues are complex, difficult, and extremely time-consuming to resolve, and could substantially delay the resolution of the government's case in chief."[36]

F. Henry Habicht II, assistant U.S. attorney general responsible for handling EPA prosecutions, has described joint and several liability as "a burden-shifting device to allow litigation to move forward expeditiously from the standpoint of enforcement litigation."[37]

It appears that EPA seeks out corporations with substantial financial resources and tries to force them to pay the full cost of a cleanup. But the agency's critics will be reassured to know that in a Federal Reqister announcement in February 1985, EPA did set some limits to that policy: "In cost recovery actions it will be difficult to negotiate a settlement for more than a party's assets."[38] Furthermore, EPA noted, "An excessive amount [of claims] could force a party into bankruptcy, which will of course make collection very difficult."[39]

In many cases, EPA has chosen to prosecute only a few of the many PRPs listed so as to make each case easier to handle. EPA defends this practice by claiming that after the government settles its case, the convicted PRPs can sue other PRPs that the government neglected to prosecute to make them come up with their share of the cleanup costs. This means that the government will seize an unfair share of the prosecuted private company's resources and then leave the company on its own to recover its losses from other companies.

The case of the Conservation Chemical Company (CCC), in Kansas City, Missouri, is a good example of how EPA ignores equity in pursuit of big settlements. Even though several government agencies had used CCC's waste site and even though a list of over 100 private contributors to CCC was available, only four PRPs that had deposited 55 percent of the waste were sued for total cleanup costs. IBM was included, even though-- according to EPA's own documents-- the company had contributed less than l percent of the volume of waste at the site. The four PRPs in turn sued 175 other generators and several government agencies.[40]

In Midco, Indiana,

A group of generators representing @ 60% of the volume of waste allegedly sent to the two sites offered to clean up the second site, reimburse EPA for half of the cost incurred in the cleanup of the first site and take additional action representing 85% of the estimated costs and remedial actions required. The DOJ [Department of Justice], on behalf of EPA, rejected this effort and sued only four of the 121 generators for the total cleanup costs. The government alleges that these four companies are strictly, jointly and severally liable for reimbursing all government costs and through injunctive relief, to carry out all necessary remedial activities. Among the four generator defendants are those companies that led the effort to undertake a voluntary site cleanup and cost reimbursement plan.[41]

The federal government is routinely suing private corporations to get them to pay full cleanup costs at hazardous waste sites where the government itself contributed hazardous wastes. At the Rocky Mountain Arsenal, near Denver, Colorado, for example, EPA and the Department of Justice are suing Shell Oil Company for total cleanup costs of various contaminants at the site.[42] But it is clearly unfair to hold Shell fully liable, since the army has been manufacturing, storing, and disposing of chemical warfare agents in the area for years.

At another site in the Denver area, the government abandoned its joint-and-several-liability doctrine for a single defendant. The U.S. Air Force was allowed to contribute to cleanup costs on the basis of a prorated share of its waste contribution.[43]

States and localities are using the joint-and-several- liability doctrine to get companies to pay for cleaning up government landfills. According to attorney George Freeman, Jr., testifying before the Senate Judiciary Committee, "The city of New York has brought a Superfund suit to clean up its landfill, even though the illicit disposal resulted from one of its own employees dealing with organized crime."[44]

The joint-and-several-liability burden extends not only to cleanup costs but also to any future cleanup or damage costs connected with the wastes transported from the original hazardous waste site, as well as to any personal damage suits from plaintiffs claiming to be damaged by the waste site. Superfund's joint and several liability has proven to be a godsend for trial lawyers. At some sites, litigation costs have exceeded cleanup costs.

Many corporate critics of Superfund see joint and several liability as the biggest single impediment to private voluntary cleanups. EPA perceives voluntary cleanup efforts as a confession of guilt and as an invitation to hold a company responsible for all cleanup costs at a site, regardless of the company's share of the waste. Interviews with EPA attorneys, private consultants, and corporate representatives show wide agreement that joint and several liability has severely delayed cleanup processes and has created a maximum incentive to litigate--in effect turning Superfund into a full-employment program for trial lawyers.

Superfund's liability scheme has effectively destroyed the market for private liability insurance for environmental impairment. Only one insurance company now offers coverage for pollution-related suits. Before Superfund, the market for private insurance was developing rapidly. Now, with any generator or transporter facing potentially unlimited liability, no insurance company can calculate premiums.

A Department of Justice report on the insurance crisis recommended the elimination of joint and several liability. As the department noted, "Joint and several liability frequently operates in a highly inequitable manner--sometimes making defendants with only a small or even de minimis percentage of fault liable for 100% of plaintiff's damage."[45] The department also said that joint and several liability is often used as a means to attack "deep pockets" that may bear little responsibility for the problem. Amusingly, in a footnote added after the original draft of the report was completed, Superfund was specifically exempted; Justice noted that without joint and several liability, "the effective enforcement of these programs could be seriously impeded as a result of protracted and costly litigation among responsible parties."[46] In other words, joint and several liability is bad except when the government uses it, and then it is good.

Superfund's worst failing is that it has done little to protect the environment. After six years and over a billion dollars spent, only 10 sites have been cleaned up, and even several of those still leak. Three-quarters of the federal Superfund budget has been spent on litigation and on endless studies--studies that are often repeated while the original contamination spreads and the problem worsens. Superfund is actually a Supershuffle consisting of juggling hazardous waste from one site to another.

As one EPA contractor told the Wall Street Journal, "We were creating a hole in Massachusetts and a hill in New York."[47] Most of the hazardous wastes removed from Superfund sites have been sent to other landfills. But according to a 1985 report, GAO found that most of the sites it surveyed that received Superfund wastes were themselves in serious violation of EPA regulations.[48] Thus, wastes that had been leaking into the groundwater at one site were expensively transported to another site, where they also leaked into the groundwater. Even when Superfund wastes are not being sent to leaking landfills, other government agencies often continue to send their wastes to landfills that EPA has fined or enjoined from operating.

Most of the sites EPA claims to have cleaned up have involved the relatively simple process of transporting drums of hazardous wastes from one location to another. In some cases, more ambitious efforts have been involved, but not necessarily with encouraging results. For example, GAO found that at one site, four different ponds and lagoons had to be pumped out on four separate occasions because rainwater kept filling them up again and reactivating their hazardous constituents after the EPA cleanup.[49]

GAO found that between two and three years usually elapse from the time EPA declares a site hazardous to the time the actual cleanup begins.[50] EPA's cleanup efforts have been mired in mountains of paperwork. Instead of expediting cleanups, EPA prefers to make sure that no one can criticize it in the future for not considering all the options. Thanks partly to its extensive bureaucratic requirements for NPL sites, EPA has begun cleanups at over twice as many non-NPL, supposedly less hazardous sites as NPL sites.

EPA begins its cleanup process with a "remedial investigaon/feasibility study" (RI/FS) designed to examine all possible options. As OTA observed, "Good quality early work is ignored in a lockstep, 'start from scratch' RI/FS approach as studies are needlessly repeated, delaying remedial action. . . . In many cases, . . . the RI/FS may represent the third or fourth study of the same site by EPA contractors."[51] Yet the quality of contractors' RI/FS's is widely perceived by both industry and environmental groups to be often shoddy. As OTA noted, "Contractors who may not have done quality work in an early phase may be rehired at a later stage of the study or during the implementation phase."[52] Joel Hirschhorn of OTA observed, "We have people putting numbers into these reports that are completely off the wall--like costing incineration out at $10 a ton when the going rate is $400 to $600 a ton. When I say lack of quality, we are talking gross negligence in the legal sense."[53]

EPA's slowness has become so notorious that according to GAO, some states have not been reporting all their hazardous waste sites to EPA because they fear that EPA will put the sites on the NPL, in which case it would take forever to get them cleaned up. Some states feel that their sites are sufficiently hazardous to warrant keeping EPA out of the cleanup process and that private companies are more likely to volunteer to clean up if EPA does not come in with its legal artillery.

One of Superfund's worst effects is its discouragement of voluntary cleanup. As an article by former assistant attorney general James Moorman observed, "Before private parties can clean up a site, they must negotiate settlement terms with EPA in the form of a judicial consent decree. . . . EPA frequently takes extended periods of time to respond to private party proposals and evidences very little flexibility or practicality during negotiations."[54]

Although the original Superfund legislation specified that private parties first be given an opportunity to clean up their messes voluntarily, EPA in practice has discouraged--and almost prevented--companies from doing so. The agency has required private companies wishing to clean up to accept administrative orders that effectively give it the right to mandate them to do almost anything, regardless of cost or relevance.

EPA also routinely withholds information from private companies wishing to do their cleanups. As Moorman noted, "Weeks and even months regularly pass before EPA responds to a private party proposal. Often EPA's rigidity thwarts settlement altogether."[55]

The Free-Market Alternative

Relying on the government to protect us from hazardous waste is rather like relying on the government to protect us from street crime; we should be happy if we do not all get mugged--or poisoned.

Federal environmental policies are based on the traditional command-and-control approach to economic problems. Yet federal policies will always be driven by pork-barrel interests, partisan squabbles, and little or no information. We should not trust our environment to slow-moving bureaucrats and vote-buying politicians.

As long as we continue to rely on the government to protect the environment, we will continue spending billions of dollars and having little or nothing to show for it. Congressmen will continue giving EPA impossible tasks and ridiculous deadlines, EPA will continue producing one fiasco after another, and serious environmental problems will continue getting worse. Politicians and bureaucrats do not have the right incentives to move quickly and effectively against environmental threats. In politics, appearances are usually more important than realities, and in bureaucracies, going through the motions is usually more important than getting the job done.

If we want a more effective, long-term solution to our environmental problems, we must change the incentives governing the treatment of our environment. Currently, congressmen have an incentive to spend as much money as possible in their home districts and to try to get on the evening news as often as possible by proclaiming new and terrible dangers. EPA has an incentive to maximize public fear of environmental hazards, thereby getting itself a bigger budget and more clout. Environmentalists have an incentive to create public fear so that they will get more contributions to use for lobbying Congress to spend more money and hire more environmentalists.

Although the government has a role in cleaning up abandoned hazardous waste sites, there is no need for it to invoke its police powers and effectively claim eminent domain over thousands of currently operating factories around the country. By greatly expanding government control, EPA minimizes private corporations' freedom to effectively deal with their own problems. If the main threat to private companies was the law of torts, they would be confronted with a much more effective threat to their livelihood.

It is especially inane to rely on the government when private solutions are available. The greatest danger from hazardous wastes is groundwater pollution. Currently there is little or no recognition of property rights in groundwater. Thus, no private entity or individual has an incentive to monitor the condition of groundwater and protect it against pollution. Trusting the protection of groundwater to accountable private sources would be far more effective than trusting it to various groups of bureaucrats, each of whom insists that he is not responsible. GAO has repeatedly criticized EPA for its indifference and apathy toward monitoring groundwater pollution. EPA is more likely to use its limited resources on putting out fires than on understanding the forest. Politicians have not made monitoring for pollution a major issue, largely because routine tests do not get headlines or win votes. Environmentalists often speak of the need for more testing, but they lack the resources to effectively monitor the nation's groundwater.

Groundwater rights could be established in the same way that property rights for oil were established. Unitization was established for oil fields after a long search for sound rules, and many of the lessons learned in that instance could be used for groundwater. Once groundwater is no longer seen as a "free good," there will be an entirely different attitude toward those who contaminate it. Every property owner is in effect a policeman overseeing his own rights, so creating property rights in groundwater would vastly increase the number of people with a strong incentive to protect our environment.[56]

Property rights would not be a panacea in themselves, but they would be a huge improvement over endless political bickering. It would be far easier to make progress under a regime of private responsibility and cooperation than it is under a system of political command and control.

The federal government is currently neglecting the task it is best suited for: researching the health dangers of various chemicals and pollutants. We need far more understanding of which chemicals pose threats to humans and at what concentrations. We also need to know the best way to neutralize the threats. The current program sometimes causes more health threats than it alleviates, by stirring up dormant chemicals that would have been harmless if they had been left where they were. It is inexcusable that so little has been done on the research front. As our knowledge expands, we will likely realize that the current bans on many chemicals are some of the most costly, least effective regulations ever enacted. And it may be that other chemicals should have been banned but were not.

Unless we shift our emphasis and put more faith in property rights and less in political promises, our environment will

continue to be neglected and we will continue to have little clear idea of the extent of environmental threats.

FOOTNOTES

[1] General Accounting Office (GAO), cited in Reauthorization of Superfund: Hearings before the House Committee on Energy and Commerce. Subcommittee on Oversiqht and Investiqation, April 29, 1985, p. 8.

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