Why Superfund Was Needed

By Senator Robert T. Stafford
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The country has waited a long time for the Superfund law dealing with chemical poisons in the environment. What we have now is, in my judgment, the major preventative health law passed by the Congress in the past four years.

Together with the other members of the Senate Committee on Environment and Public Works, I worked on this legislation for nearly three years. I will not say that it was a labor of love, because the process was trying. We were beset with problems at nearly every turn.

But it has been a three-year trial well worth it. Eighty percent of the American people wanted some legislation. That sentiment was reflected in the Senate, where 24 Senators joined as sponsors of the legislation. And, judging from what we know, those concerns are well founded. The Surgeon General of the United States considers toxic chemicals to pose the major threat to health in the United States for the decade of the 1980s.

Modern chemical technology has produced miracles that have greatly improved this Nation's standard of living. But the increased generation of hazardous substances associated with these new products has proved to be a serious threat to our Nation's public health and environment.

The legacy of past haphazard disposal of chemical wastes and the continuing danger of spills and other releases of dangerous chemicals pose what many call the most serious health and environmental challenges of the decade. Chemical spills capable of inflicting environmental harm occur about 3,500 times each year, and an estimated $65 million to $260 million is needed to clean them up. More than 2,000 dump sites containing hazardous chemicals are believed by the Environmental Protection Agency to pose threats to the public health. The cost of containing their contents is estimated to be an average of $3.6 million per site.

Pervasive Chemicals

The acceptance of man-made chemicals--to the extent that they are hardly recognized as such anymore--has become a fact of daily life in the United States. We are dependent on synthetic chemicals for health, livelihood, housing, transportation, food, and for our funerals.

But within recent years, there has been a realization that what is our meat may also be our poison. Here are some examples:

* In a report dated March 1980, the Library of Congress concluded that damages to natural resources of the United States because of toxic chemicals were "substantial and enduring." The report identified damaged resources ranging from all five of the
Great Lakes to the aquifer underlying the San Joaquin Valley, possibly the richest agricultural area in the United States.

- In a report to the President of the United States, the Toxic Substances Strategy Committee concluded that the cancer death rate in the United States had increased sharply and that "occupational exposure to carcinogens is believed to be a factor in more than 20 percent of all cases of cancer."

- In a report released in the spring of 1980 by the Congressional Office of Technology Assessment, agricultural losses because of chemical contamination were placed at $283 million. The report said the value was based on economic data from only six of the 50 States and was therefore "likely to be a gross underestimation of the actual costs."

- In 1979, the total production of chemicals in the United States was 565 billion pounds. Of this amount, 347 billion pounds was of chemicals officially classified by the United States Government as hazardous. Production growth was increasing at a rate of 7.6 percent in 1979. At that rate, production will double in 10 years.

This is not to say that chemicals are necessarily bad. On the contrary, they have contributed mightily to American prosperity. We rely increasingly on them because of this contribution which they made to American life in a changing and sometimes hostile world. In fact, most chemicals are benign. Only a small number of them cause cancer, birth defects, or other illnesses. But the fact remains that, small though the relative number of these dangerous chemicals may be, they can cause terrible damage when set loose on the public. Moreover, because we do use these substances in such a large volume, the number of incidents involving them has increased dramatically in the recent past.

**EPA Survey**

Using existing documentation, the Environmental Protection Agency identified some 250 hazardous waste sites involving damages or significant threats of damages. Among the reported incidents were 27 sites associated with actual damages to health (kidneys, cancer, mutations, aborted pregnancies, etc.), 32 sites which have resulted in the closure of public and private drinking water wells, 130 sites with contaminated ground waters and 74 sites where natural habitats have been damaged and are adversely affecting indigenous species.

The preliminary findings of a joint States/EPA survey of pits, ponds, and lagoons used to treat, store, and dispose of liquid wastes identify 11,000 industrial sites with 25,000 such surface impoundments. At least one-half of the sites are believed to contain hazardous wastes. The survey found that virtually no monitoring of ground water was being conducted and that 30 percent of the impoundments, or 2,455 of the 8,221 sites assessed, are unlined, overlie usable groundwater aquifers, and have intervening soils which would freely allow liquid wastes to escape into groundwater.

Thomas Jorling, the former EPA Assistant Administrator for Water and Waste Management, testified before the Senate Subcommittee on Environmental Pollution and Resource Protection in 1979, saying:

"...there are about 3,500 incidents involving chemicals per year from sources which have the potential of releasing significant quantities of hazardous substances either onto land or into water. Of these, it is estimated that about 50 percent of 1,700 spills would reach navigable
waters...there are about 700 to 1,200 significant spills per year."

Some examples of the type of accidents that have resulted from spills and other non-waste disposal incidents include:

- PCBs, a cancer-causing insulating fluid whose manufacture is now banned, leaked from an out-of-service transformer, entered the food chain and spread through 19 States and two foreign countries. Hundreds of thousands of hogs, chickens, turkeys, and a large quantity of other food stuffs had to be destroyed.

- One-third to one-half of the drinking water and irrigation wells in the San Joaquin Valley have been contaminated by a pesticide, DBCP. In sufficient amounts, this pesticide is known to cause sterility in males. It is suspected also of causing cancer.

- From 1970 to 1977, the number of railroad transportation incidents involving hazardous substances increased 700 percent. Fatalities increased by 300 percent. A witness from the National Transportation Safety Board testified that 85 percent of those increases would have been prevented by the installation of relatively inexpensive safety devices.

- Portions of Lakes Ontario and Erie have been closed to commercial fishing because of chemical contamination. The taking of coho salmon, stocked through the lakes to encourage a viable commercial and sport fishery, is banned because of chemical contamination.

Additional studies reveal that the spread of dangerous chemicals by spills and other incidents is presently a major environmental problem in this Nation:

- The Congressional Research Service of the Library of Congress recently completed a catalogue of natural resources lost or destroyed through releases of hazardous or toxic substances. It is almost 250 pages long, yet the Congressional Research Service says it is an incomplete effort.

- In a recent report, the Department of Agriculture identified surface water basins which were contaminated by chemicals. These basins included practically the entire middle South.

The Surgeon General of the United States, in a report to the Senate Committee on Environment and Public Works, said that, in his opinion, toxic chemicals posed a major threat to public health in the United States. There is not one adult American who does not carry body burdens, of one or several of these substances, many of which have now been removed from the market because of their dangers.

What I have just described is the scope of the toxics problem in the United States. The scope is not just of inactive hazardous waste disposal sites, as tragic as Love Canal may be. Nor is the scope confined to accidental spills into rivers, as disastrous as they may be. The problem is just as broad as the benefit.

I am not suggesting, nor have the members of my Committee suggested, that chemicals be banned. What we have proposed through legislation is that we reduce the number of people who may become victims of chemical poisoning incidents.
Legislative History

For three years, the Senate worked on a bill that would respond to emergencies caused by chemical poisons, and to seek to discourage the release of those chemicals into the environment. In many ways, the Senate bill was analogous to the natural disaster assistance programs we have enacted into law. When those natural disaster assistance laws were enacted, no one suggested that we should respond to floods, but not to earthquakes.

It makes nor more sense to make that kind of distinction when dealing with chemical emergencies than it does when dealing with natural emergencies.

There is simply no good reason for us to respond to one type of release of a poison, but not another. The test should not be whether poison was released into river water rather than into well water; or by toxic waste buried in the ground rather than toxic waste discharged to the ground. The test should be whether the poison was released. I assure you that the victim does not care to make those distinctions, nor should we.

At the time of publication, Senator Stafford (R-Vt.) was Chairman of the Senate Environment and Public Works Committee. He had served in Congress for two decades first as a Representative 1961-71, and served then in the U.S. Senate.