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BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES
OF THE
HOUSE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION

Mr. Chairman and members of the Committee:

We are pleased to be here today to discuss our Superfund work. We have issued a series of reports since 1981 on hazard-ous waste disposal and will be coming out with a comprehensive report on Superfund reauthorization issues within the next few weeks.

I will focus today on the extent of the hazardous waste problem, on the status of cleanup efforts, and on the projected cost of cleaning up the nation's hazardous waste sites.

Specifically, we found that:

- --The Environmental Protection Agency (EPA) has not yet identified all potential sites and the Department of Health and Human Services has not completed health risk evaluations;
- --EPA has completed cleanup at but a few of the worst sites and has many more sites to clean;
- --based on available resources, EPA has concentrated its cleanup efforts on the worst sites and has left the cleanup of most sites to the states; and

--estimates of future costs to clean up hazardous waste sites are uncertain but clearly the cost will be great.

Before I expand on our findings, let me give you a brief overview of the Superfund program. The 1980 Superfund Act sought to clean up uncontrolled hazardous waste sites that pose threats to health and environment. To the extent that responsible parties can be identified, EPA attempts to have them either perform cleanups themselves or reimburse the government for cleaning up the sites. The act provides a \$1.6 billion cleanup fund accumulated largely from taxes on petroleum and certain chemicals. The expiration of the taxing authority in September 1985 provides the Congress with an opportunity to assess the program's status and direction.

## FUTURE COSTS

The amount of federal funding needed to make the nation's hazardous waste sites safe depends on the number of sites needing cleanup and the extent to which EPA can charge responsible parties for the costs involved.

As required by the Superfund Act, EPA submitted a report to the Congress on December 11, 1984, projecting the size and focus of the Superfund program and future funding needs. EPA estimates that the inventory of priority sites, the 786 worst currently listed sites and anticipated additions, will amount to some 1,500 to 2,500 priority sites over the next several years. Clean up estimates of federal costs for these 1,500 to 2,500 priority sites range from \$7.6 billion to \$22.7 billion in fiscal year 1983 dollars. It is EPA's best judgment that the

list will increase to 1,800 priority sites with future federal funding requirements projected at \$11.7 billion.

We developed alternative cost estimates on the basis of historical data and other information available at the time of EPA's study. Under our analysis, which assumes continuation of past levels of operation, the number of priority sites could grow to 4,170 with federal cleanup costs ranging from \$6.3 billion to \$39.1 billion.

While EPA did not project the related state and responsible party cleanup and maintenance costs, we estimate that such costs could amount to an additional \$33.7 billion for the 4,170 sites, \$7.6 billion for the states and \$26.1 billion for responsible parties.

## EXTENT AND RISK OF THE HAZARDOUS WASTE PROBLEM

Information as to the number of hazardous waste sites in this country and the extent of health risks associated with them is incomplete. The Congress, EPA, and the public cannot be sure that human health and the environment are being adequately protected.

Given available resources, EPA has given higher priority to evaluating the hazards posed by known sites and has placed relatively little emphasis on the identification of new sites. The Resource Conservation and Recovery Act requires (1) that each state compile an inventory of all its hazardous waste sites and (2) that EPA compile the inventory in states that do not. Both state and federal efforts in this regard have been limited. In 1982 EPA created a central data base of potential

Information System. Since then EPA and the states have relied primarily on local governments and the public to discover new sites. Sites have been added to the Information System based on reports of suspected sites from citizens, police, fire, health, and other state and local officials. But EPA has not mounted a systematic site discovery effort.

EPA's December 1984 Information System inventory contains 19,368 potential hazardous waste sites, and EPA estimates that this list will eventually grow to about 25,000 sites. EPA acknowledges, however, that if a targeted, systematic discovery and investigation effort were undertaken and the types of hazardous waste sites addressed under Superfund were broadened, as could well be reasonably done, the number of sites on its inventory would increase dramatically—to over 378,000 sites.

EPA reported that there are many currently operating facilities—such as municipal and industrial landfills—that have the potential for becoming Superfund sites. In addition, EPA has identified a number of categories where policy changes or changes of program emphasis could generate additions to the total number of sites. Those categories include (1) contamination from underground storage tanks containing non-petroleum products that are currently not covered by Superfund, (2) sites contaminated by agricultural uses of pesticides, (3) radioactive waste sites, (4) non-workplace asbestos sites, (5) single-party sites such as wood preservative contamination in log homes, (6) contamination of rivers and harbors, and (7) contamination from naturally occurring hazardous substances.

Under Superfund legislation the Department of Health and Human Services was required to undertake health studies, laboratory projects, and chemical testing to determine relationships between exposure to toxic substances and illness. Except for one health 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. Eight health studies and six laboratory projects were underway, however, and 6 other health studies were in the planning stage. Although the Department had planned to complete testing of about 70 chemicals or chemical combinations by September 30, 1983, as of December 31, 1984, tests involving 9 chemicals had been started and 2 had been completed. The Department recognizes that it has made less progress in implementing its Superfund program than was originally planned and attributes this to funding delays, budget reductions, and staffing limitations.

## PROGRESS ON SITE CLEANUP

Under Superfund EPA responds to hazardous substance releases or threatened releases on a removal or remedial basis. Removal responses require prompt action at any hazardous waste site but do not necessarily serve as final measures to reduce hazards; remedial responses are designed to provide priority sites a permanent remedy but are not necessarily prompt.

The Superfund cleanup program has experienced difficulties during its first 4 years. EPA considers that 10 sites have been cleaned up. Program activities have focused predominantly on preliminary steps such as inspecting sites, performing studies, and designing cleanup actions. Although EPA had completed 430

removal actions to reduce immediate threats at sites as of February 1985, the degree of cleanup provided has varied widely. Non-priority sites have generally received more thorough cleanup than priority sites. As a result, EPA has had to take repeated removal actions at priority sites. EPA has recognized shortcomings in its current cleanup process and is making changes to clarify and streamline the program. It is too early to determine how successful these changes will be.

## STANDARDS

Although Superfund legislation provides funding and authority for cleaning up hazardous waste sites, it does not provide standards to be used in determining the degree of clean-up required. The absence of cleanup standards has a direct bearing on program cost and on the extent to which cleanup actions will protect public health and welfare and the environment. EPA sets its Superfund standards on the basis of environmental standards contained in other statutes which do not address all of the substances and conditions found at hazardous waste sites.

There is disagreement among experts as to how much site cleanup is appropriate. Opinions range from the belief that all sites should be cleaned up to pristine conditions, to the belief that cleanup decisions should be made on a site-by-site basis, taking into consideration factors such as cost, risks to the surrounding population, and the availability of appropriate

cleanup technology. Part of the difficulty in setting standards is that little information is available on how hazardous waste sites affect human health and the environment. EPA's current approach of using existing standards and comparing risks with the cost of cleanup and available funding for all sites may be the most reasonable approach under the circumstances.

## NON-PRIORITY SITES

In implementing Superfund, EPA has limited its remedial cleanup responsibility to priority sites. These represent relatively few of the nation's uncontrolled hazardous waste sites. As stated earlier, EPA projects that it will eventually identify as many as 25,000 potential sites; however, less than 10 percent of these are expected to be Superfund priority sites eligible for permanent cleanup under EPA's current policy. While the priority sites EPA has targeted for permanent cleanup action are among the worst in the nation, many of the remaining sites also present serious health and environmental risks. Unlike other environmental laws--such as the Clean Air Act, Clean Water Act, and the Safe Drinking Water Act--Superfund does not require EPA to set and ensure compliance with national standards. EPA has chosen to concentrate its efforts on the worst sites, to respond to emergencies at other sites, and to leave the cleanup of most sites to the states. As a result, EPA does not direct, monitor, or oversee state cleanup actions at non-priority sites. State resources, authorities, and capabilities vary widely. As a result, the public may not receive uniform protection from the dangers posed by hazardous waste sites.

We would point out that the following options are available in connection with your reauthorization deliberations:

- (1) Make no change in the basic structure of the Act.

  Superfund would continue to provide for cleanup at only the

  Nation's worst hazardous sites on a priority basis, as resources
  will allow. EPA would not have responsibility for setting
  national standards or delegating cleanup functions to the
  states.
- (2) Change the structure of Superfund more along the lines of previous environmental legislation, emphasizing permanent, long-term remedies, and giving EPA responsibility for setting national standards fo dealing with hazardous waste sites. States could be delegated some or all cleanup functions with EPA retaining oversight responsibility.

The information we have gathered suggests that the Congress should give careful consideration to the merits of changing the structure of the Act. The absence of national cleanup standards complicates an already lengthy, complex process for cleaning up hazardous waste sites. The lack of precise information as to how hazardous waste sites affect human health and the environment makes standards setting difficult. Nevertheless, if we are to provide consistent site cleanup on a national basis it is important that, where feasible, reasonably uniform criteria be established to govern cleanup decisions at both the federal and the state levels.

Mr. Chairman, this concludes my statement. We will be pleased to respond to your questions.