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STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON COMMERCE, TRANSPORTATION, AND TOURISM
OF THE
HOUSE COMMITTEE ON ENERGY AND COMMERCE
ON

STATUS OF THE GENERAL ACCOUNTING OFFICE REVIEWS CONCERNING EPA'S SUPERFUND ACTIVITIES

Mr. Chairman and members of the Subcommittee:

We are pleased to be here today to discuss the status and tentative results of our ongoing reviews of the Environmental Protection Agency's (EPA's) Superfund program. Our work is focused on:

--state experiences with waste-end taxes and some of the implementation problems that may be encountered if there were a similar federal tax,

--EPA's estimate of the cost to clean up the nation's worst hazardous waste sites,

--success of the Superfund removal program in responding to immediate hazardous waste threats, and

--the progress being made by EPA to clean up three hazardous waste sites.

In addition to these four reviews, we have other ongoing and planned work that is focused on answering questions that may arise during Superfund's reauthorization. We plan to issue a

comprehensive report on our Superfund efforts to the Congress in March 1985.

Before discussing the tentative results of the four ongoing reviews that I just mentioned I should add that EPA has not been given the opportunity to comment on our observations.

STATE EXPERIENCES WITH WASTE-END TAXES

The first ongoing assignment that I will discuss is our review of California's, New Hampshire's, and New York's experiences with their taxes on generators of hazardous waste--a so called waste-end tax--and some of the potential implementation problems of a similar federal tax or fee. Several such proposals are being considered, one of which is contained in this Subcommittee's recent bill H.R. 4813.

The objectives of the waste-end tax systems in all three states are (1) raising revenue, among other things, to finance the clean up of abandoned hazardous waste sites and (2) encouraging desirable waste management practices such as waste recycling and incineration. This latter objective is being pursued by exempting such practices from taxation or varying the tax rate. For example, New York charges $12 per ton for land disposal of waste, but it charges only $2 per ton for wastes incinerated at the waste generators facility. Recycled wastes are exempt from the tax.

Our work indicates that none of the three states have collected the revenue they anticipated. California projected that it would raise $10 million per year from its tax on waste generators. For 1981, the first year of the tax, about $9.2

million was collected. For 1982 about $7.6 million was collected. A state tax official attributed the first year shortfall to reclassifying certain types of waste generators to a lower tax rate. The larger second year revenue shortfall was attributed to taxpayer reporting errors, such as wastes being reported in the wrong tax category, that the state hopes to correct.

New Hampshire estimated annual tax receipts of $700,000 from its tax on hazardous waste generators but fell more than $622,000 short for each of the tax years ending June 30, 1982 and 1983, the first 2 years of the tax. State officials attributed the large shortfalls solely to an unrealistic projection that greatly overstated the amount of hazardous wastes actually being generated.

New York projected $10 million in revenue from its tax on hazardous waste generators but fell $7 million short for the year ending August 30, 1983, the first year of the tax. New York officials cited several possible reasons for the shortfall including: a depressed economy, inaccurate revenue projections, loss of out of state business at New York disposal facilities, and misuse of a recycling exemption. Little analysis, however, has been done by the state to determine how much of the shortfall is attributable to each of these factors.

We could not determine how successful the states have been in achieving their second objective of encouraging desirable waste management practices because of a lack of pre- and post-tax trend data and analysis concerning hazardous waste treatment, storage, and disposal practices.

Information needs is an area we are focusing on to identify some of the potential implementation problems of a federal waste end tax. Our work indicates that successful implementation of a federal waste-end tax will require more information than is now available. For example, making accurate revenue projections, measuring changes in waste management practices, and assuring compliance with the tax require detailed information on the types and quantities of waste generated, as well as the treatment, storage, or disposal methods used. Information that is now available nationwide is either incomplete or unreliable. EPA is now implementing a system that will require states and hazardous waste handlers to report biennially on their activities. Such a requirement could provide some of the needed data on waste generation and the treatment, storage, or disposal methods used. EPA estimates that the data obtained from these reports will be available in early 1985.

The biennial report, however, was not designed to meet the needs of a waste-end tax. Changes to the report's format, data requirements, and frequency of reporting will likely be required. We plan to identify more specific information needs in our report we hope to issue by May 1984.

COSTS ESTIMATES TO CLEAN UP WORST SITES

Our second assignment involves assessing EPA's latest effort in estimating the number of hazardous waste sites that will likely be added to the National Priority List (NPL)[1], and the

[1]The National Priority List identifies hazardous waste sites that are eligible for remedial action under Superfund.

costs associated with cleaning up those sites. According to EPA's December 8, 1983, study entitled "Superfund Task Force Preliminary Assessment," 1,400 to 2,200 hazardous waste sites will likely require cleanup action. Superfund-financed costs to accomplish this task are estimated at between $8.4 billion and $16 billion.

Preliminary indications suggest that these cost estimates may not reflect the total resources required to clean up NPL sites. For example, EPA's cost estimates do not include costs to clean up about 40 percent (about 520 of the 1,400) of the NPL sites. EPA estimates that responsible parties[2] will clean up these sites and will not require federal funds. Because responsible parties have not taken a large number of cleanup actions at NPL sites to date, little data are available to conclude that 40 percent of the sites will not require Superfund monies.

Additionally, the study's estimates of the number of sites needing cleanup and the cost of these cleanups are based on assumptions that are difficult to confirm. For example, EPA arrived at its low estimate of 1,400 NPL sites by assuming that 20 percent of future sites investigated will be placed on the NPL. However, this is lower than the historical average of 28 percent. EPA based its 20 percent figure on the belief that new sites will be less hazardous than those found in the past.

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[2]A person, corporation, or other entity who is (1) a past or present owner or operator of a site and/or (2) a generator or transporter who contributed hazardous substances to a site.

EPA's higher estimate of 2,200 NPL sites is based on the estimated 1,400 NPL sites included under current policies and additional hazardous waste sites that might become Superfund sites should certain policies be changed. These additional 800 sites might include federal facilities with hazardous waste problems, closed conventional landfills, existing hazardous waste landfills, and other sites existing on Indian lands, or other sites involving mining wastes or radioactive substances. EPA acknowledged that these 800 additional sites were considered on the basis of its subjective judgment.

EPA estimates that construction may cost $4.5 million per site to clean up the worst sites in the country. This cleanup cost does not include groundwater cleanup. The study assumed that an additional $6 million per site in capital costs for a total construction cost of $10.5 million per site is needed for groundwater cleanup. EPA agrees that there is considerable uncertainty about these costs because little actual experience has occurred in cleaning up sites. Currently, only seven remedial actions have been completed.

In summary, although EPA's study provides estimates of the number of sites and the total costs needed to clean up NPL sites it is not clear that these estimates provide a reliable assessment. We plan to complete our analysis of EPA's cost estimate and issue our report by May 1984.

SUPERFUND REMOVAL PROGRAM

The third assignment I will briefly mention is the Superfund removal program. Our objective is to determine how well EPA is

managing this program to address immediate hazardous waste threats. Our preliminary work indicates that the Superfund removal responses may not

--represent the best use of limited resources,

--address the identified hazard effectively, and

--support long-term cleanup goals.

For example, at one site EPA has spent over $300,000 to lower hazardous liquid waste levels in a lagoon three times. Rain water kept refilling the lagoon, threatening to overflow hazardous wastes and pollute a nearby drinking water supply. Since long-term cleanup at this site was at least 2 years away, a more permanent measure could have been taken, such as complete draining and removing of contaminated soils.

Although our work is not completed, we have indications that this kind of problem has occurred at other locations. We plan to complete this work and issue our report by November 1984.

EFFORTS TO MITIGATE PROBLEMS AT THE THREE SITES

Our fourth review focuses on problems encountered in cleaning up three NPL sites--LiPari Landfill, New Jersey; Laskin/Poplar Oil Company, Ohio; and the Picillo Farm, Rhode Island. This Committee requested that we address three issues at these sites: (1) the factors hampering cleanup efforts, (2) the use of cleanup versus containment, and (3) the manner in which cost-effective determinations are being made.

Factors hampering cleanup

Although the problems at these sites predate Superfund, the site cleanup work is still not complete. New Jersey State closed

the LiPari Landfill in 1971. Ohio received complaints on the Laskin/Poplar Oil Company site at least as early as 1976, and fire and explosion at Picillo Farm in 1977 brought that site to the attention of Rhode Island officials.

We have identified several problems that may have contributed to site cleanup delays or safety problems. These include a cleanup feasibility study that had to be redone at Picillo, additional studies to comply with the National Contingency Plan[3] at LiPari, incomplete removal of hazardous waste stored on site at Laskin/Poplar, and delayed fencing of the LiPari and Laskin/Poplar sites.

Use of containment

The National Contingency Plan provides flexibility in deciding how to remedy problems regarding cleanup or containment of waste at Superfund hazardous waste sites. At the three sites, a mix of cleanup and containment measures are being considered but no final decisions have been made on what remains to be done.

Our review of the LiPari site, however, provided some insight into the cleanup vs. containment issue. For example, two factors--cost and technology--suggested that total cleanup would not be feasible. A 1982 study estimated that it would cost $32 million to totally clean up the site by transporting 290,000 cubic yards of wastes and soil to a landfill 360 miles away. In addition, an EPA official told us the technology to clean contaminated material at sites like LiPari is not yet cost-effective or proven. As a result, the remedial action chosen for LiPari

[3]The National Contingency Plan outlines response authorities for responding to releases of hazardous wastes.

involves building a slurry wall and encapsulating 16 acres at the site.

Although actions at LaPari have contained the hazardous wastes at the site, additional work may be required because some pollution of area surface and groundwaters continues through the current containment wall. The director of New Jersey's Division of Waste Management told us that to enhance the reliability of containment at LiPari, a program to remove and treat the contaminated groundwater within the site is an absolute necessity. The decision on whether and how to treat groundwater contamination at the site will be made after additional studies are performed. Such an effort, however, could require the state to assume long-term expenditures to operate and maintain the site.

Cost-effective cleanup

The National Contingency Plan states that the cleanup actions selected should be cost-effective and mitigate and minimize damage to and provide adequate protection of public health, welfare, or the environment.

During our review, one concern of the cost-effectiveness issues was the lack of environmental standards (such as to what level should groundwater be cleaned) for use in making cost-effectiveness determinations. An EPA Region II official indicated that if cleanup standards existed, a range of alternatives to accomplish specific levels of cleanup at a given site could be identified and examined. Without such standards, this official said that remedial actions that would accomplish a wide range of problem mitigation are studied and an alternative is selected that

seems to provide the most mitigation for the cost involved. He characterized this approach as more "cost-benefit than cost-effectiveness analysis." The difference being, cost-effectiveness measures different ways to meet a common goal whereas in cost-benefit analysis there is no common goal.

EPA has acknowledged that circumstances will frequently arise in which there are no clearly applicable standards for hazardous waste site cleanup. The agency's position is that it cannot develop standards for the hundreds of substances it will be confronted with in response actions. Also, such a task would be costly, time consuming, and unduly hamper the cleanup of those sites. Without such standards, however, we are unable to determine if the most cost-effective remedy is being selected.

We plan to complete this assignment and issue a report by May 1984.

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As I mentioned earlier, our work on these assignments is not yet complete. As a result, the preliminary observations that I have mentioned here are subject to change.

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