



United States
General Accounting Office
Washington, D.C. 20548

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Resources, Community, and
Economic Development Division

B-277908

October 3, 1997

The Honorable Jerry Lewis
Chairman, Subcommittee on VA, HUD,
and Independent Agencies
Committee on Appropriations
House of Representatives

Subject: Environmental Protection: EPA's Fiscal Year 1998 Superfund Budget

Dear Mr. Chairman:

On August 28, 1996, in Kalamazoo, Michigan, the administration announced a major initiative to accelerate the pace of the toxic waste cleanups performed under the Environmental Protection Agency's (EPA) Superfund program. The goal of this initiative is to clean up, by the year 2000, the 900 sites on the Superfund program's National Priorities List (NPL). According to EPA, the Superfund program had already cleaned up 423 sites, as of March 1997. As a part of its fiscal year 1998 budget request, EPA stated that it will require an additional \$650 million as a first step toward addressing the remaining 477 NPL sites.¹

Because of your interest in EPA's fiscal year 1998 Superfund budget request, you asked us to determine if EPA based its budgetary requirements on the most current available information. We concentrated our review on 58 Superfund sites because approximately \$620 million, or 95 percent of the additional \$650 million requested for fiscal year 1998, is directed toward these sites. According to EPA, 27 of the sites were ready for cleanup work

¹EPA's total fiscal year 1998 budget request for the Superfund program is \$1.72 billion, which includes \$650 million specifically for the work aimed at meeting the agency's goal of completing the cleanup of the 900 sites by the year 2000.

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to begin during fiscal year 1997, but funding was not available. The remaining 31 sites were to become ready for cleanup during fiscal year 1998.

RESULTS IN BRIEF

EPA's fiscal year 1998 Superfund budget request to clean up the 58 Superfund sites is potentially overstated by \$205 million because EPA used historical cost data from fiscal years 1987 through 1995 as the basis for its request, rather than the more recent cost information that was available to the agency when it prepared its budget request. For 27 of these sites, EPA had the more recent cost estimates that were provided by the EPA regions responsible for the cleanups. While such estimates are not available for the other 31 sites, EPA's most recent data suggest that the cost of cleaning up these sites could be substantially less than the amount the agency has requested. EPA's data show that cleanup costs during recent years have been substantially reduced, which EPA has attributed in part to administrative improvements in the Superfund program, such as standardized remedies for cleaning up certain types of sites.

FUNDING REQUEST FOR SITE CLEANUPS MAY BE OVERSTATED BY \$205 MILLION

EPA's budget request for cleaning up the 27 toxic waste sites that were ready for cleanup during fiscal year 1997 was based on historical cost data for the agency's Superfund cleanup activities. Had EPA based its request on the more recent cost estimates provided by its regions, its request could have been reduced by about \$128.3 million. On the basis of historical estimates, EPA requested \$300 million to clean up these 27 sites. In preparing its budget request, EPA used historical cost estimates for cleanup activities performed from fiscal years 1987 through 1995, adjusted for inflation and engineering changes.

EPA's Superfund resource management office provided us with cost estimates that indicate that the cost of cleaning up the 27 sites might be substantially less than the amount requested in EPA's budget submission. These estimates were prepared by the EPA regions responsible for these sites. We estimate that, on the basis of the information provided by the regions, the average current cost of cleaning up a site would be \$6.36 million. Therefore, had the regions' estimates been used to develop EPA's budget request, the estimated cost of cleaning up the 27 sites would be \$171.7 million, or \$128.3 million less than the amount actually requested. EPA officials told us that the agency did not use the more recent estimates

to prepare its budget request because it had used historical data in prior years and did not wish to change its methodology.

EPA's budget request also includes \$320 million to begin work at 31 new sites in 1998, an amount also based on historical data for fiscal years 1987 through 1995. However, EPA has recent data showing that cleanup costs have been declining. By basing its budget request on these recent data, EPA could have reduced its request by nearly \$77 million.

EPA's recent experience with the Superfund program suggests that cleanups cost less than they did in the earlier years of the program. For example, in responding to our February 1997 testimony on Superfund cleanups,² EPA provided data showing that the average cost of a site cleanup completed in fiscal years 1993 through 1995 was about \$2.8 million less than the average cost for fiscal years 1987 through 1992.

EPA believes that cleanup costs will continue to decline because of improvements in the Superfund program to make cleanups faster and more efficient. For example, EPA believes that its Superfund Accelerated Cleanup Model will enable the agency to accomplish cleanups in less time at less cost. This model includes (1) integrated site assessments to reduce redundancies in data collection, (2) non-time-critical removals (which streamline the steps for studying a site's contamination and for designing a cleanup method) to reduce risks sooner by accelerating some cleanup actions, and (3) presumptive remedies to identify in advance the most effective cleanup remedy for a given situation. EPA has stated that other improvements, such as community-based remedy selection and the establishment of a National Remedy Review Board, will also promote cost-effectiveness and result in future cost reductions.

Had EPA used its most recent available data for fiscal years 1993 through 1995 to determine the cost of the 31 cleanups, its budget request for the sites would have been based on an average cost of \$7.85 million per site. This lower cost would have resulted in a request for \$243.4 million rather than for \$320 million, a reduction of \$76.6 million.

In September 1997, EPA officials told us that they visited EPA's regions in August 1997 to perform a site-by-site analysis of Superfund sites that the

²Superfund: Times to Assess and Clean Up Hazardous Waste Sites Exceed Program Goals (GAO/T-RCED-97-69, Feb. 13, 1997).

agency would like to clean up by the end of calendar year 2000. The officials told us that their analysis shows that \$1.3 billion will be needed to complete cleanup work at a total of 516 sites. They also said that EPA's fiscal year 1998 budget request of \$650 million was meant to be the first installment toward the total amount needed. However, the EPA officials were not able to provide us with the information that we had requested to show by fiscal year the specific sites to be cleaned up and their costs. The officials acknowledged that, while EPA had estimated in its budget request that 58 sites would be ready for cleanup activities to begin during fiscal year 1998, the agency does not have any analyses showing which or how many sites will be ready for such activities during that year.

AGENCY COMMENTS AND OUR EVALUATION

We provided a draft of this report to EPA for review and comment. (See enc. 1 for EPA's comments.) EPA disagreed that its budget request may be overstated. According to EPA, the results of the analysis that it performed in August 1997 demonstrate that its budget projections were sound and that it needs \$1.3 billion, including a \$650 million installment in fiscal year 1998, to meet the agency's cleanup goals by the end of calendar year 2000. The Director of EPA's Office of Emergency and Remedial Response said that he understood that we have "received this updated site specific information which supersedes the resource estimates made over a year ago and which should be the foundation for validating" the agency's fiscal year 1998 budget request. However, EPA did not provide information in either its written comments or in response to our earlier requests to show the specific sites to be cleaned up during fiscal year 1998 or their costs. In this regard, the only documentation that EPA has provided us to support its fiscal year 1998 request shows that work would be performed at 58 sites, which were not specified, and that the costs of this work would be similar to EPA's historical cleanup costs for fiscal years 1987 through 1995. Because EPA's data show that its cleanup costs have been reduced in recent years, we believe that the agency should use its most recent cost data as a basis for its budget estimates, rather than its historical costs. Accordingly, we continue to believe that the budget request for fiscal year 1998 may be substantially overstated.

EPA also commented that it will be more appropriate to consider the effects of its program reforms on budget needs in later years because fiscal year 1998 funds are needed to support activities that largely reflect decisions that EPA had made before program reforms were implemented. As stated earlier, we believe that the agency should base its funding decisions on its most

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recent cleanup cost data. Our analysis was based on these data, some of which may reflect the effects of program reforms.

In performing our work, we visited EPA's headquarters office located in Washington, D.C., and EPA's offices in Regions II (New York) and V (Chicago). We reviewed EPA's fiscal year 1998 budget request for the Hazardous Substance Superfund Trust Fund, including the documentation prepared by EPA to justify its need for resources to clean up Superfund sites. We also met with officials from EPA regional and headquarters units to review the processes EPA used to prepare its budget assumptions. We conducted our review from March 1997 through September 1997 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Administrator of EPA. We are also sending copies to the Ranking Minority Member of your committee, to the Chairman and the Ranking Minority Member of the Subcommittee on VA, HUD, and Independent Agencies, Senate Committee on Appropriations, and to other interested parties. We will also make copies available upon request.

Please call me at (202) 512-4907 if you or your staff have any questions. Major contributors to this report were Ed Kratzer, John Wanska, Jimmie Gilbert, and John Yakaitis.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Peter F. Guerrero', with a long horizontal flourish extending to the right.

Peter F. Guerrero
Director, Environmental
Protection Issues

Enclosure -1

COMMENTS FROM THE ENVIRONMENTAL PROTECTION AGENCY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 19 1997

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Peter F. Guerrero
Director
Environmental Protection Issues
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Guerrero:

Thank you for the opportunity to review and comment on the Draft Report entitled "Superfund: Duration of the Cleanup Process at Hazardous Waste Sites on the National Priorities List (GAO/RCED-97-238R) and the Draft Fact Sheet "EPA's Fiscal Year 1998 Superfund Budget." This letter formally transmits our comments on these draft documents.

EPA has shown improvements in the time required to cleanup Superfund sites as reflected in the fact that more sites have been completed in the past four years than were completed in the first twelve years of the program. Our reform efforts have been key to this success. However, as demonstrated in our attached comments, we are concerned that not enough time has passed to see the results of all of our reforms in a statistically significant way in terms of average time savings or cost. However, we feel the anecdotal results demonstrated in the FY 1996 Superfund Administrative Reforms Annual Report are good measures of the success of our reform efforts. In addition, we have provided a chart which demonstrates a trend toward reduced durations. We feel this is an analysis which appropriately depicts programmatic trends.

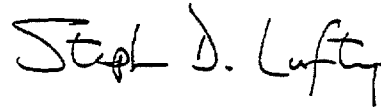
EPA's discussions with GAO on the FY 1998 President's Budget request took place during the same time period that significant data gathering for several Congressional offices was underway. Our projection methods estimated an incremental need of approximately \$650 million in FY 1998 to address the site backlog and accelerate cleanup in the Superfund program. The results of our more current site-by-site analysis have demonstrated that our budget projections were sound and validated our need for the incremental funding. It is my understanding that your office has received this updated site specific information which supersedes the resource estimates made over a year ago and which should be the foundation for validating our FY 1998 budget request.

Again, we thank you for the opportunity to review these draft documents and hope our comments will be strongly considered as the report and fact sheet are finalized. Should you have

ENCLOSURE 1

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any questions or concerns regarding these comments, please contact Robin Richardson at (703)603-8912.



Stephen D. Luftig
Director
Office of Emergency and Remedial Response

Enclosures

cc: Timothy Fields, Jr.
Steven A. Herman
Sallyanne Harper
Cliff Rothenstein
Barry Breen
Steve Tiber

EPA COMMENTS
GAO Fact Sheet "EPA's Fiscal Year 1998 Superfund Budget"
September 8, 1997

Over the course of recent months, EPA and the Superfund program have demonstrated that we have sufficient candidate sites and contracting capacity to reach 900 site completions by the end of calendar year 2000. Therefore, we need the funding levels requested in the FY 1998 President's Budget to implement this aggressive goal. Our resource projections developed in 1996 and site-by-site programmatic information updated in August 1997 strongly support these statements.

EFFECTIVE RESOURCE PROJECTIONS ARE PROVEN BY SITE-SPECIFIC FACTS

EPA develops resource projections starting 18-24 months prior to the beginning of the fiscal year. Uncertainties exist in all elements of hazardous waste cleanup which could cause a wide variability in projection results. The Agency's projection methodology attempts to minimize this variability through the use of standard pricing factors and site projections. Empirical data have corroborated these projections and pricing factors. While legitimate concerns can be raised regarding the individual elements of the projection methodology, the results have proven sound.

Specifically, in stating that "Funding for 27 sites may be overstated by \$128 million," the analysis focuses on one aspect of the projection methodology. In the same manner that a projected universe of sites may have a lower average cost, changes in the projected lead on these, or any projected site, could result in a higher average cost. Similarly, changes in the actual number of projects (operable units) expected per site could also change the average cost and the cost projection significantly. Therefore, empirical data (i.e., the site specific data developed just prior to the beginning of the fiscal year) should be used in determining the validity of the prior year projections.

IMPACTS OF REFORMS IS LIMITED IN CURRENT UNIVERSE OF SITES

Additionally, the assertion that the average costs should be lowered to reflect the impacts of program reforms will be more appropriate in later years since a large percentage of the funding needs for FY 1998 are to support site activities reflecting pre-reform decisions. Some reforms (e.g. the ROD-revisit reform) may impact even these sites and this would be reflected in the site-specific data collected in August 1997.

SITE LISTS AND FY 1998 RESOURCE NEEDS CONFIRM THE NEED FOR ADDITIONAL \$650 M

In preparation for actual distribution of the appropriated funds, usually during August, the Superfund program collects site-specific schedules and funding needs. In response to Congressional requests, the Agency undertook this effort earlier during May, producing the "FY98 Resource Needs" list in June. This list of site needs validated our FY 1998 budget request, demonstrating that EPA needs the funding requested for FY 1998. Therefore, EPA feels that this more current site information supersedes the initial projection methodology. In August 1997, EPA Headquarters representatives traveled to all ten Regions to further update project information, schedules, and funding needs, confirming again our need for the total requested FY 1998 funding.

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