

November 1994

SUPERFUND

Estimates of Number of Future Sites Vary



**Resources, Community, and
Economic Development Division**

B-257698

November 29, 1994

The Honorable John D. Dingell
Chairman, Committee on Energy and Commerce
House of Representatives

The Honorable Al Swift
Chairman, Subcommittee on Transportation
and Hazardous Materials
Committee on Energy and Commerce
House of Representatives

When Superfund, the Environmental Protection Agency's (EPA) program to clean up the nation's worst hazardous waste sites, was created in 1980, the program was expected to deal with a limited number of sites over a relatively short time. Now we know that the number of sites needing attention is much larger than originally believed and that the program could run at least several more decades. However, there is uncertainty about how many sites may eventually enter the program and whether fewer, less heavily contaminated sites are now being reported to EPA than were reported earlier in the program's history. Estimates about how many sites will need cleaning up in the future could influence policy-making about the program's design and the division of cleanup responsibilities between federal and state governments.

Because of your interest in these subjects, you asked us to (1) examine trends in the number of reported sites and EPA's evaluation of potential contamination at these sites as indicated by the agency's site inspections and (2) review recent estimates of the future growth of the Superfund program.

Results in Brief

Since 1980, almost 37,000 nonfederal sites have been reported to EPA's hazardous waste site inventory. The number of sites reported each year has declined steadily since 1985, reaching 1,159 nonfederal sites in fiscal year 1993. However, the proportion of sites judged upon inspection to have serious potential contamination in fiscal year 1993 was the same (43 percent) that it averaged in the past. EPA officials said that the number of reported sites has declined not because the supply of potential sites is being exhausted, but because the states, which are the principal source of site reports, believe that they can handle cleanups more efficiently and prefer to deal with sites in their own cleanup programs.

Recent estimates of the number of reported sites that will eventually be included in the National Priorities List—the register of Superfund sites—vary widely. EPA has estimated that 1,700 new sites could be added to the priorities list through the year 2020. The Congressional Budget Office (CBO)¹ concluded that 3,300 new nonfederal sites could be added to the priorities list through the year 2027.² Our analysis shows that between 2,500 and 2,800 nonfederal sites could be added to the priorities list just from the inventory of sites undergoing or awaiting evaluation.

Background

EPA does not actively seek out sites for the Superfund program but relies on states or interested parties to report them. Once reported, sites are added to EPA's inventory for evaluation. As of March 1994, EPA's inventory had 36,785 nonfederal sites, of which 1,192 had been placed on the National Priorities List.

Evaluation of potentially hazardous sites occurs in several stages. At the completion of each stage, EPA may determine that no federal action is needed or it may proceed to the next stage. First, EPA requires that a site receive a preliminary assessment within a year of its entry into the inventory. The preliminary assessment involves a review of available documents and possible site reconnaissance. If the preliminary assessment indicates a potential problem, the site moves to the next stage of evaluation—the site inspection—which involves collecting and analyzing soil and water samples as appropriate.

If warranted by the results of the site inspection, sites enter the final decision process. This process involves other evaluations, including an extended site inspection if needed, scoring under EPA's hazard ranking system; and a judgment by EPA officials on the appropriateness of listing the site on the priorities list. An extended site inspection requires more samples and could involve installing wells to monitor groundwater or other nonroutine data collection activities. The hazard ranking system is a method of quantifying the severity of site contamination to determine if a site should be placed on the list. The system assigns a numerical score based on the likelihood that a site has released or has the potential to release contaminants into the environment, the characteristics of the contaminants, and the people or environments affected by the release. A

¹The Total Costs of Cleaning Up Nonfederal Superfund Sites, Congressional Budget Office (Jan. 1994).

²EPA's Inspector General also prepared an estimate of future sites to be added to the priorities list. As discussed later in the report, this estimate was only for a portion of the sites in the current inventory being assessed for the Superfund program.

site must score at least 28.5 on the hazard ranking scale in order to be placed on the list. Sites can be dropped from further consideration following the extended site inspection or the scoring process. Sites also can be dropped from further consideration if, in the judgment of EPA regional officials, the sites do not pose risks great enough to warrant a Superfund cleanup.

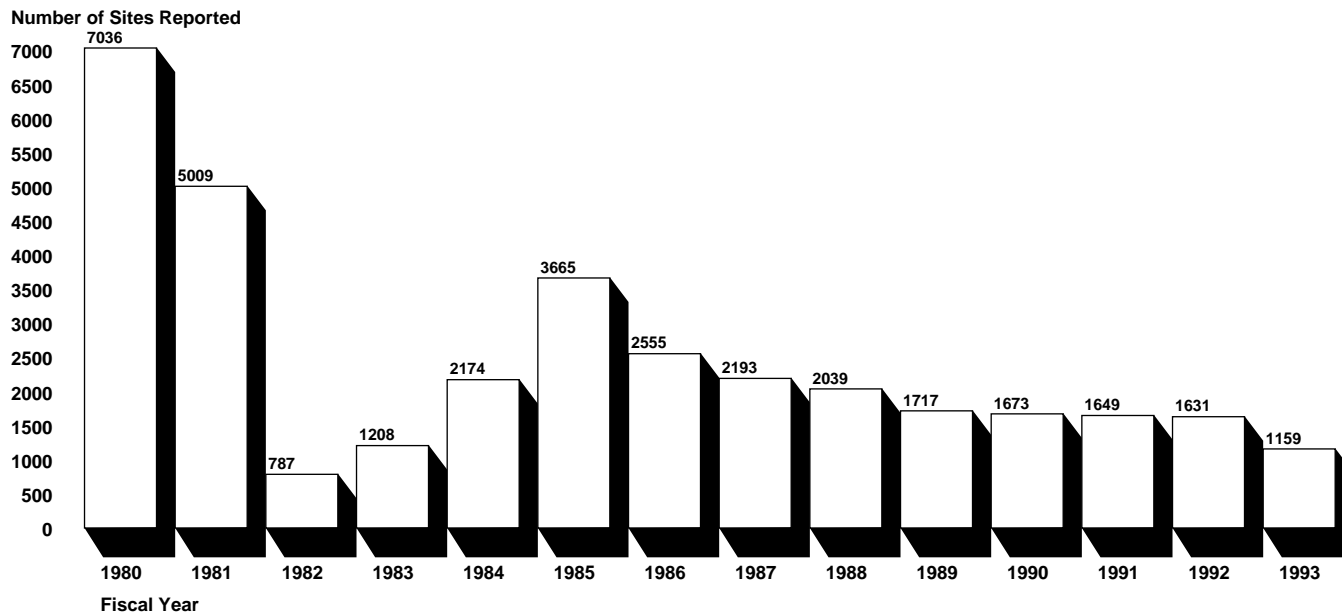
In addition to the sites following the process described above, the EPA inventory includes a large group of sites that have already been inspected but are awaiting reevaluation because of a change in the evaluation process. The Superfund Amendments and Reauthorization Act of 1986 required EPA to revise its evaluation system to make it more comprehensive and accurate in its assessment of threats to human health and the environment. According to EPA site assessment officials, the revision will change the mix of sites, but not necessarily the number of sites, that will end up on the priorities list. The revision was effective in March 1991. During the transition to the revised system, sites were evaluated through the site inspection stage using the original evaluation system. However, EPA decided to use the new system to make final decisions about placing these sites on the priorities list. In October 1991, EPA began to reevaluate these 6,467 sites, which it referred to as its evaluation backlog. Reevaluation could include collecting additional site information as well as limited sampling. As of the close of fiscal year 1993, EPA had completed this process for about 1,600 of the 6,467 sites.

Reported Sites Have Declined in Number but Not in Severity of Contamination

Fewer sites are being reported to EPA for evaluation, but site inspection results indicate that new sites reaching the site inspection stage are as likely to have contamination requiring a Superfund cleanup as those inspected in the past.

Fewer Reported Sites

The number of sites reported annually has been declining since fiscal year 1985. (See fig. 1.) In fiscal year 1993, 1,159 sites were added to the inventory—29 percent less than the prior year and 68 percent less than in fiscal year 1985.

Figure 1: Nonfederal Sites Reported by Fiscal Year


Note: These sites do not include those owned by the federal government. We have discussed federal agencies' efforts to identify and evaluate their hazardous waste sites in the following reports: Superfund: Backlog of Unevaluated Federal Facilities Slows Cleanup Efforts (GAO/RCED-93-119, July 20, 1993) and Federal Facilities: Agencies Slow to Define the Scope and Cost of Hazardous Waste Site Cleanups (GAO/RCED-94-73, Apr. 15, 1994).

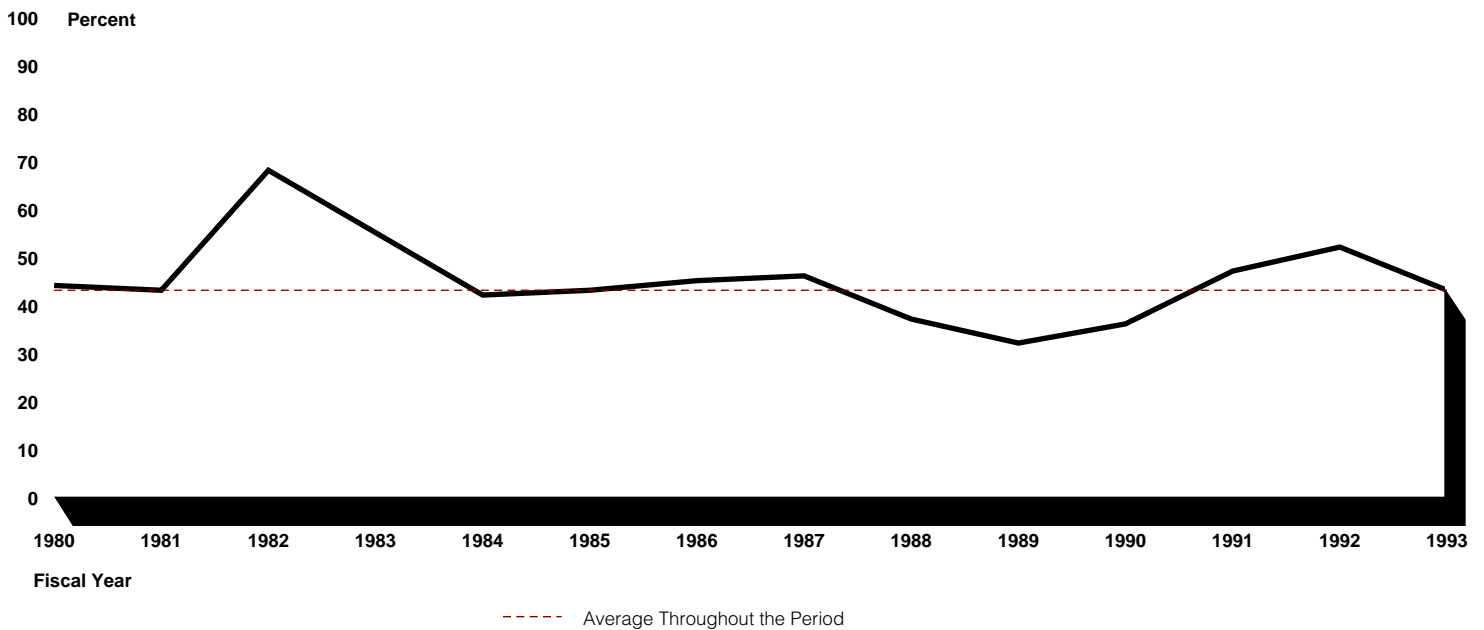
EPA attributed the decline since 1985 to the fact that many states now have their own Superfund programs. According to EPA site assessment officials, states are reluctant to report new sites, preferring instead to manage the cleanup themselves.³ EPA Region I site assessment officials suggested that states generally report sites that present challenging enforcement or cleanup problems.

³The reason for states not reporting sites is explained in greater detail in Relative Risk in Superfund (GAO/RCED-94-233R, June 17, 1994).

Percentages of Sites Judged Potentially Hazardous Have Not Been Declining

The percentage of sites that EPA believes warrant further consideration after completing the site inspection has been fairly steady for the last 10 years.⁴ (See fig. 2.)

Figure 2: Percentage of Sites Considered for Further Action on the Basis of the Site Inspections



From program inception through fiscal year 1993, 43 percent of the 17,556 sites inspected were considered hazardous enough to need further consideration for the priorities list. In fiscal year 1993, 43 percent of the 725 sites inspected were also considered for further action. (App. II provides statistics on the number and percent of nonfederal sites accepted and rejected for further consideration after site inspection.)

⁴We have not used the results of the preliminary assessment—the evaluation stage preceding the site inspection—as an indicator of trends in the seriousness of site contamination because it does not usually involve on-site data collection. In addition, EPA officials believe that preliminary assessment results, taken alone, are not very significant indicators of trends in the severity of site contamination. The rate at which sites have been accepted for further consideration following a preliminary assessment has declined since the early days of the program but has fluctuated within a range in recent years. Appendix I provides statistics on the number and percentage of nonfederal sites accepted and rejected for further consideration after a preliminary assessment, by fiscal year.

EPA officials do not expect to find in the future very large, heavily contaminated sites equivalent to Love Canal, which entered the Superfund program early in its history. However, the officials believe that contamination at newly discovered sites is generally not less severe than at previously reported sites—just less obvious. Earlier site discoveries more often included sites where the hazards were visible, such as barrels of hazardous waste above ground. Sites that are being discovered and reported now, according to EPA officials, are those with less obvious—but equally serious—problems, such as groundwater or drinking water contamination.

Estimates of Future Superfund Workload Vary Widely

Recent estimates of the future size of the Superfund workload have differed. In congressional testimony in February 1994, EPA forecast the smallest increase—1,700 new sites. In a report dated January 1994, CBO predicted 3,300 new sites through 2027, although it said that a wide range of additions was possible. EPA's Inspector General in a January 1994 report estimated that 3,000 of the 6,467 sites in the agency's evaluation backlog could be added to the Superfund.

EPA Estimated the Smallest Increase in Superfund Sites

In February 1994 congressional testimony,⁵ EPA's Administrator testified that the Superfund National Priorities List could grow to about 3,000 federal and nonfederal sites, or roughly 1,700 more sites than are currently on the list. According to EPA officials, this estimate was based on an internal agency analysis prepared by the Office of Emergency and Remedial Response. The Office prepared low, medium, and high estimates, and EPA based its testimony on the medium estimate. (See app. III for a detailed breakdown of EPA's estimates.)

EPA's estimates treated current and future inventory sites differently. In EPA's medium estimate, 6.5 percent of the currently reported sites were estimated to become Superfund sites compared with 3.5 percent of the sites that will be reported in the future. The inventory of reported sites was estimated to grow by 20,500 sites by the year 2020, or 54 percent more than at present. The estimate projected that the number of sites added to the inventory each year would decline from 1,500 sites in fiscal years 1994 through 1999 to 500 sites in fiscal years 2010 through 2019. EPA officials said that they based the decline on less state reporting, not on the existence of fewer sites that could be reported.

⁵Testimony before the Subcommittee on Transportation and Hazardous Materials, House Committee on Energy and Commerce (Feb. 3, 1994).

CBO Predicted Largest Increase in Sites

CBO's estimate of potential future Superfund additions was developed in two parts. (See app. V.) First, CBO estimated the number of sites that would be reported to EPA's inventory of potential hazardous waste sites by developing trend lines based on the number of sites reported from 1981 to 1992. Because of the data's variability, CBO developed a base case, or most probable scenario, and low- and high-case scenarios.⁶ In the base case, CBO estimated that 25,394 sites would be added to the inventory by the year 2027. This estimate was about 5,000 sites higher than EPA's medium estimate.⁷ In the low and high cases, CBO estimated that 15,151 and 50,000 sites, respectively, would be added.

Second, to determine the percentage of reported sites that would ultimately be placed on the priorities list, CBO relied on EPA staff's opinion since, according to CBO's report, usable site evaluation data were not available. When asked by CBO, EPA staff estimated that between 5 and 10 percent of all future inventory sites would be placed on the priorities list. CBO chose 8 percent for its base-case estimate and applied this rate to current and future inventory sites. For its own medium forecast, EPA estimated that 6.5 percent of the current inventory and 3.5 percent of the sites added to the inventory in the future will be placed on the priorities list. CBO's base-case estimate, after adjustment to eliminate federal sites, resulted in adding 3,300 more sites to the priorities list. The range of additional sites for the low- and high-case scenarios was between 1,100 and 6,600 sites.

Inspector General Estimated Many Backlogged Sites Could Move to Priorities List

EPA's Inspector General estimated that 3,136 sites in the evaluation backlog could move to the priorities list. This estimate was made as part of a study of EPA's processing of these backlogged sites.⁸ At the time of the Inspector General's review, EPA had evaluated only 942 of the 6,467 sites. To estimate the number of potential sites for the priorities list, the Inspector General determined the proportion of sites evaluated in each region that were found to warrant consideration for the priorities list. The Inspector

⁶CBO used historical trends in site reporting to develop its scenarios. CBO used data from 1981 through 1992 to obtain its base-case projection and data from 1987 to 1992 to obtain its low-case estimate. The office used historical data for its high-case estimate but assumed a slower decline in site reporting.

⁷EPA prepared high, medium, and low forecasts of the future size of the National Priorities List, each of which assumed different inventory growth rates. The 3,000-site estimate—the medium forecast—was used by the EPA Administrator in congressional testimony. The high estimate (4,162 sites) assumed that 25,000 sites would be reported.

⁸"Program Enhancements Would Accelerate Superfund Site Assessment and Cleanup," Environmental Protection Agency, Office of Inspector General (Jan. 31, 1994).

General then applied these proportions to the total number of backlogged sites in each region and added the regional numbers. The Inspector General reduced the total to account for an estimated proportion of sites that drop out in the final decision process.

More recent data suggest that the Inspector General's estimate may be somewhat high. According to EPA's site evaluation staff, the Inspector General's estimate of 3,136 additional sites is high since it assumed that in the future, 52 percent of the sites in the backlog could move beyond the site inspection stage, the rate prevailing when the Office of Inspector General did its study. However, data for fiscal year 1993, available after the Inspector General completed the study, showed that the percentage of the backlogged sites warranting priorities list consideration had dropped to 28 percent.

Superfund's Eventual Workload May Be Higher Than EPA's Estimate

The number of future Superfund sites cannot be predicted with certainty. However, data from an EPA study of potential U.S. hazardous waste sites and our own analysis indicate that, assuming no major restructuring of the program, EPA's estimate of 1,700 additional future Superfund sites is conservative. The CBO estimate, especially the upper bounds of that estimate, may be a better predictor of potential program growth.⁹ Given the limited pace of site cleanup by the Superfund program to date, any of the increases in Superfund's size discussed in this report may be difficult for the program to manage.

Large Number of Sites Could Be Added to the Inventory

A September 1991 EPA analysis estimated that 58,000 sites could be added to the inventory in the future.¹⁰ When EPA made this estimate, it already had 34,618 sites in its inventory, for a combined total of 92,618 sites. This total is almost 6,000 sites more than CBO's high-case scenario estimate for the number of sites that would be in the inventory by 2032 and 1-1/2 times as high as the upper-bound estimate by EPA for the size of the inventory by 2020. Both CBO and EPA based their estimates on the number of sites expected to be reported under current EPA and state policies, not on the number that could be reported. The 58,000-site estimate, on the other hand, is for sites that could be reported.

⁹As indicated later in this report, the number of future Superfund sites could be reduced if proposals to expand the states' responsibility for cleanups are adopted.

¹⁰"The Superfund Universe Study: Interim Report," Environmental Protection Agency, Office of Emergency and Remedial Response, Hazardous Site Evaluation Division (Sept. 30, 1991).

The estimated 58,000 sites consisted of sites that were assessed as having a high or moderate hazard potential. The estimate was developed from estimates for 12 individual industries provided by EPA divisions familiar with them. Each industry estimate was based on an analysis of data and judgment by EPA officials. Most of the sites were in one of the following categories: Resource Conservation and Recovery Act industrial process waste facilities,¹¹ municipal solid waste landfills, off-site oil and gas waste management facilities, and large-quantity hazardous waste generators.

EPA officials familiar with seven of the major categories,¹² accounting for 93 percent of the 58,000 sites, told us that the results are still valid. The officials said that the study's figures represent the best estimates of the potential number of sites that could be added to the inventory in the future, although one official believed that the number of treatment, storage, and disposal facilities was overstated by 2,000 sites. The officials said that in no case did an actual inventory of potential sites exist.

A Larger Percentage of Currently Reported Sites Could Be Placed on the Priorities List

Our analysis indicates that between 10 and 11 percent of the currently reported nonfederal sites could become Superfund sites. This percentage is greater than the 6.5 percent indicated in EPA's medium estimate and is closer to CBO's 10 percent high-case estimate. As of September 30, 1993, EPA had completed evaluation for 26,026 of the 35,782 nonfederal sites in its inventory. The remaining 9,756 sites were in various stages of evaluation: 930 sites were awaiting final listing decisions, 4,892 backlog sites were awaiting final evaluation, 2,373 sites were awaiting site inspection, and 1,561 sites were awaiting preliminary assessment. If 1993 screening rates for these categories, as described in appendix IV, were to continue into the future, 2,497 to 2,799 of the 9,756 sites could become Superfund sites. Adding this range to the 1,177 sites already on the priorities list would result in a total estimate of 3,674 to 3,976 Superfund sites, or 10 to 11 percent, of the 35,782 inventoried sites. The Acting Deputy Director for EPA's Hazardous Site Evaluation Division believed that the 1993 evaluation rates were a reasonable basis for forecasting future Superfund additions from the current inventory.

¹¹This category includes all facilities that produce or manage industrial nonhazardous wastes from manufacturing or industrial operations.

¹²The seven categories were Resource Conservation and Recovery Act Subtitle D industrial process waste facilities; hazardous waste generators; municipal solid waste landfills; oil and gas sites; nonfuel mining sites; Resource Conservation and Recovery Act Subtitle C treatment, storage, and disposal facilities; and underground injection wells.

We also recognize, however, that certain factors make estimates of the number of future Superfund sites subject to substantial uncertainties. First, the rate at which sites move through the assessment process onto the priorities list may change in the future, making projections based on past rates inaccurate. Also, proposed legislation to reauthorize Superfund, which has been considered by the Congress, contains provisions to encourage parties responsible for hazardous waste sites to clean them up outside of the regular Superfund program and to authorize states, in cooperation with EPA, to assume certain cleanup responsibilities. These changes could reduce the number of sites that EPA would have to manage in the Superfund program.

Future Superfund Workload May Be Difficult to Manage

Any of the estimates discussed in this report suggest that EPA will be challenged by its future Superfund workload. In the 14-year history of the program through July 1994, Superfund has completed the construction of remedies (such as the installation of groundwater pumps and filters) at 234 of the 1,300 federal and nonfederal Superfund sites. Two years ago, EPA estimated that 650 sites would reach the construction-completed stage by the year 2000. At these completion rates, it could take many decades for Superfund to clean up its current inventory and future additions to the inventory. Although EPA has recently developed new procedures to speed up the cleanup process, it is too early to tell what impact they will have on the overall pace of the program.

Agency Comments

As agreed with your offices, we did not obtain written agency comments on a draft of this report. However, we discussed the contents of this report with program officials from EPA's Office of Emergency and Remedial Response (Superfund). EPA's Acting Site Assessment Branch Chief said that the facts presented in this report were balanced, fair, and accurate. He also said that program changes under consideration by the Congress and EPA, such as proposals to increase the states' cleanup role, could significantly reduce the number of sites to be added to the Superfund program.

Scope and Methodology

We conducted our work at EPA headquarters in Washington, D.C., and at its regional offices in Boston (Region I), Chicago (Region V), and Denver (Region VIII). We selected these regions because they presented a cross-section of Superfund activity and were geographically diverse. We obtained and reviewed recent reports and studies on the future size of the

Superfund workload. We obtained and analyzed site inventory statistics on preliminary assessment and site inspection processing since program inception through the first quarter of fiscal year 1994. We interviewed EPA headquarters officials and program management officials in three EPA regional offices, as well as environmental protection officials in two states, about Superfund site discovery and evaluation. We reviewed the relevance and appropriateness of studies conducted by CBO, EPA, and EPA's Office of Inspector General and interviewed EPA program officials on the status of major site categories that could affect the Superfund site inventory. We performed our work in accordance with generally accepted government auditing standards between August 1993 and July 1994.

As arranged with your offices, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies of the report to other appropriate congressional committees; the Administrator, EPA; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others upon request. Should you need further information, please contact me at (202) 512-6112 if you or your staff have any questions. Major contributors to this report are listed in appendix VI.

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

Peter Guerrero
Director, Environmental
Protection Issues

Contents

Letter	1
Appendix I Nonfederal Sites Accepted and Rejected for Further Consideration After Preliminary Assessment	14
Appendix II Nonfederal Sites Accepted and Rejected for Further Consideration After Site Inspection	15
Appendix III EPA's Estimate of Future National Priorities List Size Through 2020	16
Appendix IV Nonfederal Sites That Could Be Added to the National Priorities List From the Inventory If Fiscal Year 1993 Evaluation Rates Continue	17

Appendix V CBO's Estimate of the Future Number of Nonfederal Sites on the National Priorities List	19
Appendix VI Major Contributors to This Report	20
Figures	
Figure 1: Nonfederal Sites Reported by Fiscal Year	4
Figure 2: Percentage of Sites Considered for Further Action on the Basis of the Site Inspections	5

Abbreviations

CBO	Congressional Budget Office
EPA	Environmental Protection Agency
GAO	General Accounting Office

Nonfederal Sites Accepted and Rejected for Further Consideration After Preliminary Assessment

Fiscal year	Accepted		Rejected		Total
	Number	Percent	Number	Percent	
1980	1,357	70	570	30	1,927
1981	534	55	442	45	976
1982	680	59	471	41	1,151
1983	1,280	75	438	25	1,718
1984	2,766	64	1,549	36	4,315
1985	3,294	64	1,871	36	5,165
1986	2,590	61	1,685	39	4,275
1987	2,110	53	1,891	47	4,001
1988	1,341	41	1,925	59	3,266
1989	1,126	40	1,676	60	2,802
1990	701	27	1,907	73	2,608
1991	642	41	921	59	1,563
1992	522	29	1,259	71	1,781
1993	469	32	1,002	68	1,471

Source: Prepared by GAO using EPA data.

Nonfederal Sites Accepted and Rejected for Further Consideration After Site Inspection

Fiscal year	Accepted		Rejected		Total
	Number	Percent	Number	Percent	
1980	246	44	317	56	563
1981	186	43	244	57	430
1982	450	68	215	32	665
1983	348	55	282	45	630
1984	540	42	738	58	1,278
1985	700	43	924	57	1,624
1986	565	45	700	55	1,265
1987	629	46	724	54	1,353
1988	508	37	858	63	1,366
1989	590	32	1,280	68	1,870
1990	792	36	1,390	64	2,182
1991	986	47	1,128	53	2,114
1992	776	52	715	48	1,491
1993	314	43	411	57	725

Source: Prepared by GAO using EPA data.

EPA's Estimate of Future National Priorities List Size Through 2020

	Number of sites ^a		
	Low	Medium	High
Sites now on the priorities list	1,321	1,321	1,321
Sites that will be added to the list from the current inventory			
Site inspection completed	625	875	1,250
Awaiting site inspection	137	164	219
Awaiting preliminary assessment	81	101	122
Subtotal	843	1,140	1,591
Total priorities list sites from the already reported sites	2,164	2,461 ^b	2,912
Sites that will be added to the list from future site reports	300	718	1,250
Total	2,464	3,179^c	4,162

^aThe low, medium, and high ranges were based on the professional judgment of EPA officials about the growth of the agency's inventory of potentially hazardous waste sites and the rate at which these sites would pass through the screening process. EPA estimated a low addition to the inventory of 15,000 sites; its medium estimate was 20,500 additional sites; and its high estimate was 25,000 sites.

^bAs discussed in this report, EPA estimated that 6.5 percent of the sites reported through fiscal year 1993 would become Superfund sites. This percentage is the result of dividing 2,461, the estimated number of sites to be added to the priorities list from the already reported sites, by 37,885, the number of federal and nonfederal sites in inventory (i.e., already reported) at the end of fiscal year 1993.

^cEPA rounded the number of sites to 3,000 for purposes of its estimate. Since there were approximately 1,300 sites on the National Priorities List at the time, EPA, in effect, was estimating that another 1,700 sites would be added to the priorities list.

Source: Prepared by GAO using EPA data.

Nonfederal Sites That Could Be Added to the National Priorities List From the Inventory If Fiscal Year 1993 Evaluation Rates Continue

	Number of sites in inventory (col A) ^a	Percent of sites that could be listed (col B) ^b	Range of sites that could be listed	
			(col A)	x (col B)
Sites evaluated—not placed on priorities list	24,849			
Sites evaluated—placed on priorities list	1,177		1,177	1,177
Sites still to be evaluated				
Sites awaiting final listing decision	930	70-80 ^c	651	744
Backlogged sites awaiting final evaluation	4,892	20-22 ^d	978	1,076
Sites awaiting site inspection	2,373	30-34 ^e	712	807
Sites awaiting preliminary assessment	1,561	10-11 ^f	156	172
Subtotal of sites still to be evaluated	9,756		2,497	2,799
Total	35,782		3,674	3,976
Overall percentage of sites that could be placed on the priorities list^g			10	11

(Table notes on next page)

Appendix IV
Nonfederal Sites That Could Be Added to
the National Priorities List From the
Inventory If Fiscal Year 1993 Evaluation
Rates Continue

^aSite inventory as of September 30, 1993.

^bThe percentage of sites that could be listed for each category was determined by considering the pass rate for that category and all succeeding categories. For example, the pass rate for sites awaiting preliminary assessment considers the pass rate for preliminary assessments and the other processing steps the sites will go through such as site inspection and final listing decisions.

^cEPA could not provide data on the proportion of sites that have gone onto the priorities list after they entered the final listing decision process. However, EPA's Site Assessment Branch Chief estimated that 70 to 80 percent of these sites have been placed on the list.

^dThe range was calculated as follows: The rate in fiscal year 1993 at which backlogged sites were forwarded after reevaluation for final listing decisions, times the estimated historical percent of sites placed on the priorities list after this final listing decision process (28 percent times 70-80 percent equals 20-22 percent).

^eThe range was calculated as follows: The rate at which sites receiving site inspections were forwarded for further consideration in fiscal year 1993, times the estimated historical percent of sites placed on the priorities list after final listing decisions (43 percent times 70-80 percent equals 30-34 percent).

^fThe range was calculated as follows: The rate at which sites receiving preliminary assessment were forwarded for further consideration in fiscal year 1993, times the rate at which sites receiving site inspection were forwarded for further consideration in fiscal year 1993, times the percent of sites that would be placed on the priorities list after final listing decisions (32 percent times 43 percent times 70-80 percent equals 10-11 percent).

^gWe divided the total number of sites in the range by the total number of sites in the inventory (3,674 divided by 35,782 equals 10 percent; 3,976 divided by 35,782 equals 11 percent).

Source: GAO analysis of EPA, and EPA Inspector General data.

CBO's Estimate of the Future Number of Nonfederal Sites on the National Priorities List

	Number of sites ^a		
	Low	Base	High
Number of federal and nonfederal inventory sites ^b			
Sites already in inventory	36,814	36,814	36,814
Future reported sites	15,151	25,394	50,000
Total	51,965	62,208	86,814
Placement rate (percent) ^c			
	5	8	10
Total sites	2,598	4,977	8,681
Minus federal sites	260	498	868
Estimated priority list size before rounding	2,338	4,479	7,813
Estimated priority list size (rounded) ^d	2,300	4,500	7,800

^aCBO projected low-case additions to the year 2022, base-case additions to the year 2027 and high-case additions to the year 2032.

^bAs of the end of fiscal year 1992.

^cCBO defines placement rate as the percentage of inventory sites that will ultimately be placed on the priorities list.

^dAll three scenarios (low, base, and high) exclude federal facilities, which CBO estimates would represent 10 percent of all priorities list sites. CBO rounded the results of its calculations.

Source: Prepared by GAO using CBO data.

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