

of the Committee on Foreign Relations be authorized to meet during the session of the Senate on Thursday, August 3, 1995, at 2:00 p.m.

The PRESIDING OFFICER. Without objection, it is so ordered.

#### ADDITIONAL STATEMENTS

##### RELEASE OF GAO REPORT ON SUPERFUND

• Mr. BOND. Mr. President, I rise today to draw my colleagues attention to a report just released by the General Accounting Office that I requested on May 24, 1995. The report is entitled "Superfund: Information on Current Health Risks," and it examines the actual, current health risks at Superfund sites. I believe the results of this study are very surprising, and may have very important implications for the Superfund budget and possibly for Superfund reauthorization.

At the recent White House Conference on Small Business, Superfund reform was voted the No. 5 issue out of literally hundreds of topics of concern to small business. As these small businesses representatives know all too well Superfund liability is literally killing many small businesses. As chairman of the Small Business Committee in addition to being a member of the Environment and Public Works Committee and chairman of the Appropriations Subcommittee for the EPA, I asked GAO to prepare this report because I wanted to get a better understanding of the reduction in health risks and other benefits of the money spent on Superfund.

The GAO report looked at EPA's own data from 225 recent records of decision signed between 1991 and mid-1993. These are the sites that will soon be moving into the expensive construction phase and will be driving a big portion of the Superfund budget in the next few years.

The report found that less than one third of the sites posed health risks serious enough to warrant a cleanup under current land uses. Some of the sites in this category have no current exposure and hence no current risk. However, under current land uses, there could be a risk in the future if, for example, a ground water plume migrated to a currently used drinking water source. So this category is over-inclusive if anything. In addition, about one-half of the other sites in this category used to pose a health risk but a removal action has already been completed to address any immediate risks.

Over one-half of the 225 sites do not pose any risk warranting a cleanup under existing conditions, although they might pose a risk in the future if current land use patterns change. The remaining 15 percent of the sites do not pose risks serious enough to warrant cleanup under existing conditions or under foreseeable future conditions.

They are already in EPA's target risk range for completed cleanups.

The implications of these findings are profound. Superfund sites clearly do not threaten the health of millions of Americans. As is often stated in fact, if we stopped conducting Superfund remedial actions altogether there are only a few sites that would have any impact on human health today. However, I do not think we can conclude from this report that Superfund should be abolished entirely, this report shows that some sites do indeed pose a risk to health, and other sites may pose environmental risks sufficient to warrant cleanup, but dramatic reform is clearly needed.

I believe this report can help us to use our increasingly scarce Federal dollars more wisely, without putting anyone's health at risk. In fact, I think we can use this report to protect people's health by better prioritizing EPA's efforts on sites posing current health risks. This doesn't mean we should ignore environmental risks or future risks, but current health risks should be our first priority.

The decline in overall discretionary spending in forcing us to make significant changes in the EPA's budget. As chairman of the VA, HUD, and Independent Agencies Subcommittee, I must make reductions totaling more than \$9 billion in budget authority from the fiscal year 1995 VA-HUD bill. This is a reduction of about 12 percent, and will impact virtually all of the agencies under my subcommittee's jurisdiction, including the Department of Veterans Affairs, HUD, NASA, EPA, and the National Science Foundation, to name a few. This reduction in discretionary spending will mean that increases for any program will be nearly impossible.

Clearly, in coming years, the Agency will simply have to get used to doing more with less. The Superfund Program will not be exempt from these changes. With decreasing resources available to EPA, Superfund can be expected to take its share of cuts. In this tight budgetary climate, it is only prudent to plan for smaller budgets by focusing on prioritizing among Superfund NPL sites.

The taxes funding the Superfund trust fund are set to expire on December 31, 1995.

Legislation to reauthorize Superfund is currently moving through Congress that will bring much needed reform to the program. Fiscal year 1996 will likely be a transition year for the Superfund Program. I want to ensure that the transition is an orderly one and the Agency can avoid the problems encountered by the program during the last transition in 1985 and 1986.

In my opinion, the highest priority of the Superfund Program should be to protect current risks to human health and to ensure that sites on the national priorities list are not currently causing illness. It is inappropriate to expend significant resources on remedial ac-

tion at sites that will only pose a risk in the future, and only under changed circumstances, while sites that pose a health risk today—that are making people sick today—go unaddressed.

Currently, the Agency is not doing a sufficient job or prioritizing its resources to address the worst sites first, in part because it does not distinguish between current risks, future risks under current land uses and future risks that will only exist under changed circumstances. In response to a question by the Appropriations Subcommittee on how the Agency prioritizes its Superfund resources, EPA responded, "Once sites are listed on the NPL, Ban effort is made to maintain a stable pipeline of projects in the remedial process through resource allocation decisions." I am very concerned that by its own admission, EPA is placing a greater emphasis on bureaucratic convenience than on ongoing impacts to human health.

Our first obligation must be to protect the health of people who live around Superfund sites to stop people from getting sick due to real, ongoing exposures. It seems wrong to divert funds from these sites to sites that might only pose a risk warranting cleanup under changed circumstances simply "to maintain a stable pipeline of projects."

This GAO Report shows that Superfund is even more broken than we realized. I urge all my colleagues to read this report and consider its findings as we move forward to fund the program in fiscal year 1996 and to reauthorize the Superfund Program. I ask that the GAO Report be printed in the RECORD.

The report follows:

##### SUPERFUND—INFORMATION ON CURRENT HEALTH RISKS

U.S. GENERAL ACCOUNTING OFFICE,  
RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION,  
Washington, DC, July 19, 1995.

Hon. CHRISTOPHER S. BOND,  
Chairman, Committee on Small Business, U.S. Senate.

DEAR MR. CHAIRMAN: Superfund cost estimates are growing at a substantial rate. The Superfund program was authorized through 1994 at \$15.2 billion, covering over 1,100 non-federal sites on the National Priorities List (NPL).<sup>1</sup> These figures could grow to \$75 billion (in 1994 dollars) and 4,500 nonfederal sites, according to the Congressional Budget Office (CBO).<sup>2</sup> Because of these escalating costs, congressional decision makers want to know more about the human health risks addressed by the program. Although the Administrator of the Environmental Protection Agency (EPA) recently testified to the Congress that approximately 73 million people live fewer than 4 miles from at least one Superfund site, much debate has occurred about the extent to which these sites pose health risks for cancer or other conditions, such as birth defects or nerve or liver damage.

To help measure the health risks from Superfund sites, you asked us to provide the best available information on (1) the extent to which sites may pose health risks under

Footnotes at end of article.

current land uses, as opposed to the risks that may develop if land uses change in the future; the nature of the current risks; and the types of environmental media (e.g., groundwater, soil, or air) that pose these risks and (2) whether EPA's short-term response actions to mitigate the health risks from Superfund sites have reduced the risks under current land uses. This report presents our findings on these issues as they relate to the 225 nonfederal NPL sites contained in EPA's data base on health risks from Superfund sites—the most comprehensive automated information available as of early 1995. These sites constitute most of the sites where EPA made cleanup decisions between 1991 and mid-1993. As agreed with your office, in our ongoing work for you we will examine other related issues, such as the nature of health risks from the Superfund sites under future changes in land use.

#### RESULTS IN BRIEF

About one-third (or 71) of the 225 sites contained in EPA's data base posed health risks serious enough to warrant cleanup, given current land uses.<sup>3</sup> About another one-half (or 119) of the 225 sites did not pose serious health risks under current land uses but posed such health risks under EPA's projections about future changes in land use. The remainder of the sites did not pose health risks serious enough to warrant cleanup action under either current or future land uses. However, EPA may decide to clean up these remaining sites to comply with other federal or state regulations or because of a threat to the environment, such as contamination endangering a wetland. The current health risks at the 71 sites usually occurred through a single environmental medium, most commonly groundwater or soil. Of these 71 sites, 28 percent posed cancer risks; 30 percent posed risks for noncancer conditions, such as birth defects or nerve or liver damage; and the remainder posed risks for both cancer and other, noncancer conditions.

According to officials from EPA's Office of Emergency and Remedial Response, EPA's short-term response actions have temporarily mitigated the health risks that could immediately endanger the population surrounding the 71 sites that posed serious health risks under current land uses. Under EPA's policy, whenever a Superfund site poses such a health risk, a short-term response, known as a "removal action," will be undertaken. EPA's data indicate that various removal actions have occurred at 31 of the 71 sites. EPA officials caution that while removal actions clearly reduce health risks, information is not readily available to determine the extent to which the removal actions taken at these 31 sites affected the risks reported in the data base. The remaining 40 sites did not pose immediate risks substantial enough to warrant removal actions, according to the officials, although the sites still pose longer-term health risks under current land uses. For example, at some sites contaminated groundwater that does not immediately endanger surrounding populations may eventually reach the drinking water supplies used by current residents, thereby posing an eventual health risk.

#### BACKGROUND

With the enactment of CERCLA in 1980, the Congress created the Superfund program authorizing EPA, among other things, to clean up contamination at hazardous waste sites. CERCLA also created a trust fund available for various cleanup activities and authorized EPA to compel the parties responsible for these sites to help conduct or pay for the cleanup. The Superfund program was extended in 1986 and in 1990 and is now being considered for reauthorization. Under CERCLA, EPA assesses contaminated areas

and then places the sites it considers to be the most highly contaminated on the NPL for further investigation and cleanup.

EPA responds to hazardous substances at Superfund sites through "removal" and "remedial" actions. Removal actions are generally short-term (less than 1 year), low-cost (under \$2 million) measures intended to address actual or potential releases of hazardous substances that pose a threat to human health or the environment. Although many removal actions are temporary measures to prevent exposure by stabilizing conditions at a site or limiting access to the site, some removal actions may permanently clean up contamination.<sup>4</sup> Typical removal actions include installing security measures at a site, removing tanks or drums of hazardous substances from a site, or excavating contaminated soil. By contrast, remedial actions are long-term measures intended to permanently mitigate the risks from a site. Typical remedial actions include treating or containing contaminated soil, constructing underground walls to control the movement of groundwater, and incinerating hazardous wastes.

Once a site is on the NPL, EPA conducts a "remedial investigation" to determine whether the nature and extent of the contamination at the site warrant remedial action. One component of this investigation is a baseline risk assessment to evaluate the health risks the site would pose if no cleanup occurred.<sup>5</sup> For the baseline risk assessment, EPA evaluates health risks under both "current land-use conditions" and "alternate future land-use conditions." As an example, a site would pose health risks under current land-use conditions if local residents used groundwater containing a hazardous level of contaminants from the site as drinking water or if contaminated groundwater could eventually reach the wells of distant residents. By contrast, a site would pose health risks under alternate future land-use conditions if future land development would expose people to health risks from the site's contaminants, even if the site may not pose risks under current land uses.

At each site, EPA assesses the cancer risk, as well as the risk for other ill health conditions (noncancer risk), posed by the contaminants in groundwater, soil, surface water, sediment, air, and other environmental media to determine if these risks warrant cleanup. In the case of cancer, EPA considers the risk serious enough to warrant cleanup if the risk assessment indicates more than a 1 in 10,000 probability that exposure to the site's contaminants may cause an individual to develop cancer. In the case of noncancer health effects, such as birth defects or nerve or liver damage, EPA considers the risk serious enough to warrant cleanup if the risk assessment indicates that exposure to the site's contaminants might exceed the level that the human body can tolerate without developing ill health effects.

EPA's Responsive Electronic Link and Access Interface (RELAI) data base, from which we drew information for this report, is the most comprehensive and current automated source of EPA's data on the health risks of Superfund sites. Created in 1993, this data base contains information about health risks from EPA's risk assessments and other documents related to 225 nonfederal sites, which constitute most of the sites where EPA made cleanup decisions between 1991 and mid-1993.

#### ONE-THIRD OF SITES POSED RISKS UNDER CURRENT LAND USES

About 32 percent (71) of the 225 sites in EPA's data base posed serious health risks under the land uses current at the time of the risk assessment. About 53 percent (119) of the 225 sites did not pose risks warranting

cleanup under current land uses, but posed such risks under EPA's projections about future changes in land use.<sup>6</sup> The remaining 15 percent (35) of the sites did not pose health risks serious enough to warrant cleanup action under either current or future land uses. As we noted earlier, EPA may still decide to clean up these remaining sites because of federal or state regulations or because of a threat to the environment, such as contamination endangering a wetland.

Our analysis of EPA's data on the 71 sites posing health risks under current land uses indicates the following: At 77 percent (55) of the sites, a single environmental medium, usually groundwater or contaminated soil, posed the health risks, and at the remaining 23 percent (16) of the sites, multiple environmental media posed the health risks.

EPA's data for the 71 sites also indicate that 28 percent posed cancer risks, 30 percent posed noncancer risks, and 42 percent posed both cancer and noncancer risks. EPA's noncancer risk category includes such conditions as birth defects or nerve or liver damage.

#### REMOVAL ACTIONS HAVE REDUCED IMMEDIATE HEALTH RISKS

According to officials from the Office of Emergency and Remedial Response (OERR), EPA's removal program has mitigated the immediate health risks from Superfund sites, at least temporarily. EPA's policy requires a short-term response whenever a Superfund site poses a health risk that immediately endangers the surrounding populations. According to the OERR officials, under the removal program EPA has periodically evaluated the NPL sites and has taken intervening steps at those sites determined to pose immediate threats to health. EPA's data indicate that removal actions have occurred at 31 of the 71 sites that posed risk under current land uses.

OERR officials caution that while removal actions have mitigated the immediate health risks at these sites, information is not readily available to determine the extent to which removal actions have affected the health risks reported in the data base. According to these officials, the available information does not indicate whether the removal actions removed or treated only enough contaminants to mitigate the risks that immediately endangered a site's surrounding population. For example, a small pile of highly contaminated soil might have been removed, mitigating the immediate risks to children playing nearby but having little effect on the site's more extensive soil contamination.

OERR officials also caution that the available information does not indicate the extent to which the health risks reported in the data base may already reflect the effect of the removal actions. In some cases, a removal action may have taken place before the risk assessment. OERR officials are uncertain about whether, in such cases, risk assessors might have considered the effect of the removal in reporting the site's health risks.

Of the 71 sites posing risks under current land uses, 40 sites did not pose immediate threats substantial enough to warrant removal actions, according to OERR officials. These officials explained that although these sites did not pose risks that immediately endanger nearby populations, they still pose risks under current land-use conditions. For example, according to these officials, at some sites contaminated groundwater has not yet reached drinking water. However, under current land uses, the groundwater could eventually reach a drinking water supply, thereby posing a health risk. Table 1 categorizes these 40 sites by the environmental media posing the current health risk.

Table 1—Forty sites posing health risks under current land uses that have not warranted removal action

Environmental medium that posed health risks	Number
Groundwater .....	18
Soil .....	13
Sediment .....	2
Air .....	1
Surface water .....	0
Multiple media .....	6
Total .....	40

Source: GAO's analysis of data from EPA's RELAI data base.

#### AGENCY COMMENTS

We requested that EPA provide comments on a draft of this report. On June 19, 1995, we met with officials from EPA's OERR, including the Chief, Response Operations Branch, to obtain the agency's comments on the draft report. The officials told us that they were generally satisfied that the information presented in the report is accurate. The officials provided additional perspectives on several issues discussed in the report and also suggested technical corrections on a few matters. We revised the draft report to incorporate these comments.

#### SCOPE AND METHODOLOGY

To provide information on the extent to which Superfund sites may pose serious health risks under current land uses and on the nature of those risks, we analyzed pertinent information from EPA's most comprehensive data base on the health risks from Superfund sites. While we did not independently verify the accuracy of EPA's data, we reviewed the agency's data collection and verification guidelines and internal quality assurance procedures, and determined these internal controls to be adequate. We worked closely with EPA officials to ensure a proper interpretation and analysis of the data. Although the Agency for Toxic Substances and Disease Registry—the Public Health Service agency responsible for identifying health problems in the communities around Superfund sites—also assesses sites' health risks, we did not analyze the agency's evaluation data on Superfund sites for this report because of time constraints.

To provide information on whether EPA's short-term response actions have reduced the health risks from Superfund sites, we obtained EPA's data on the removal actions that have occurred at the 71 sites where current health risks existed. Although we did not verify this information, we discussed the information and EPA's removal policy and actions with officials from OERR's Response Standards and Criteria and Response Operations branches.

We performed our work between April and June 1995 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce this report's contents earlier, we plan no further distribution until 10 days after the date of this letter. At that time, we will send copies to the Administrator, EPA; the Director, Office of Management and Budget; and other interested parties. We will also make copies available to others on request.

The major contributors to this report are listed in appendix I. If you or your staff have any questions about this report, please call me at (202) 512-6111.

Sincerely yours,

PETER F. GUERRERO,

Director, Environmental Protection Issues.

#### APPENDIX I—MAJOR CONTRIBUTORS TO THIS REPORT

Resources, Community, and Economic Development Division, Washington, D.C.: Eileen R. Larence, Assistant Director, Patricia J. Manthe, Evaluator-in-Charge, Karen A. Simpson, Evaluator, Barbara A. Johnson, Program Analyst, Jeanine M. Brady, Reports Analyst.

Chicago Regional Office: Sharon E. Butler, Senior Evaluator.

#### FOOTNOTES

<sup>1</sup>The Congress created the Superfund program under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which authorized the Environmental Protection Agency (EPA), among other things, to clean up contamination at the nation's hazardous waste sites. EPA places the sites it considers to be the most severely contaminated on the NPL for cleanup.

<sup>2</sup>The Total Costs of Cleaning Up Nonfederal Superfund Sites, CBO (Washington, D.C.: Jan. 1994).

<sup>3</sup>EPA considers the risk serious enough to warrant cleanup if (1) an individual has more than a 1 in 10,000 chance of developing cancer from exposure to the site's contaminants or (2) if exposure to the site's contaminants might exceed the level humans can tolerate without developing other ill health effects, such as birth defects or nerve or liver damage.

<sup>4</sup>According to officials in EPA's Office of Emergency and Remedial Response, while permanent removal actions are preferred over temporary measures, EPA must consider several factors, including competing needs at other sites, in determining the appropriate removal action for a site.

<sup>5</sup>At some sites, EPA may take removal actions before the risk assessment occurs, which could reduce somewhat the risk estimated in the baseline assessment of the site.

<sup>6</sup>According to EPA officials, the Superfund program is supposed to address significant health risks under both current and future land uses. About 85 percent of sites in the RELAI data base meet EPA's criteria for serious health risk under either current or future land uses. •

#### FIRE, READY, AIM

Mr. SIMON. Mr. President, the Bosnian policy of the United States is lacking in backbone and commitment.

I confess, it discourages me.

I am not the only one who is discouraged.

A column by Tom Friedman appeared in the Sunday July 30, 1995, New York Times that is, unfortunately, on target. And I ask that it be printed in the RECORD.

The article follows:

[From the New York Times, July 30, 1995]

#### FIRE, READY, AIM

(By Thomas L. Friedman)

Washington: Lost in the commotion about the Senate vote to lift the arms embargo on Bosnia, and President Clinton's threat to veto such a move, is a small fact of some importance: Both the President's policy and the Congress's policy duck the real issue in Bosnia and are formulas for continued war.

What are our real interests in Bosnia? They are four: halt the killing, prevent the conflict from spreading, prevent the conflict from turning into a Christian-Muslim holy war and insure that it does not end in a way that permanently damages America's ties with its European allies, NATO and Russia.

The only way to realize those objectives is for the U.S. and its allies to draw up a map that divides Bosnia roughly along the lines of the NATO-Russia Contact Group proposal—50 percent Serb, 50 percent Muslim-Croat—and then use all necessary force, including bombing Belgrade if necessary, to impose those cease-fire lines on all the parties.

But, you might say, that would drag the U.S. into the war. Hey, we're already in the war. The U.S. and NATO last week committed to using their air power to defend a Muslim safe haven from further murderous

Serbian attacks. Well, if we are ready to use what Defense Secretary William Perry called "massive" air bombardments to defend an isolated Muslim safe haven, why not use them to defend a cease-fire and a settlement map that could stop the killing altogether? Why not use them to defend a peace plan that would establish a Bosnian Muslim state centered around Sarajevo, next to a Bosnian Serb entity that would be federated with Serbia and a Bosnia Croat entity that would be federated with Croatia?

Moreover, since we want the British, French and U.N. to keep their peacekeeping troops in Bosnia, and they are willing, why not have them use their power to oversee a partition plan and cease-fire lines, instead of to just oversee further carnage?

Usually countries decide their war aims first and commit their military power second. The Clinton Administration has done just the reverse. It has decided to get involved militarily in Bosnia, but with no clearly defined plan for achieving America's basic interests. If we are going to enter this war, it should only be to end this war—and the only way to do that is through some form of partition.

Of course it would be preferable to have a pluralistic, multi-ethnic Bosnian society and state, where everyone lives together. But the parties had that once. It was called Yugoslavia, and the Serbs, Muslims and Croats all helped to rip that state apart. That is why the only way to stabilize things now is to divide Bosnia among them.

But instead, the Administration and Congress are posturing. The Administration doesn't want to lift the arms embargo, but it also doesn't want to impose any settlement, because it fears that would involve America too deeply and because it knows it would mean accepting the very partition plans it advised the Muslims for years to reject. The Clinton Administration wants more of the status quo because its only clear goal is to get through November 1996 without U.S. troops in Bosnia.

The Congress, by contrast, just wants to get through the evening news. It wants to feel good about lifting the embargo, but does not want to recognize that this will only trigger a heavier Serbian onslaught against the Muslims, which they will only be able to resist in the short term with the help of direct Western military intervention, which is precisely the sort of deep involvement Congress is actually trying to avoid.

With the Administration plan the Muslims lose slowly. With the Congress plan the Muslims lose quickly.

Neither the Administration nor the Congress wants to recognize what the Europeans already have—that the ideal multi-ethnic, democratic Bosnia, if it were ever possible, cannot be achieved now. The only way to achieve it would be to force the Serbs, Muslims and Croats to live together under one roof, which they demonstrably do not want to do. None of the parties right now are fighting to live together. They are each fighting for ethnic survival or independence.

We can lament the idea of a multiethnic, pluralistic Bosnia but we cannot build it from the raw material at hand. The only sane thing left is to stop the killing and build the least bad peace around the Bosnia we have, which is one in which Serbs, Croats and Muslims live apart until they can learn again to live together. •

#### THE 75TH ANNIVERSARY OF THE 19TH AMENDMENT

• Mr. DOMENICI. Mr. President. It is my pleasure to submit for the RECORD, Executive Order 95-32, issued by the