

June 23, 2006

Via email: JRoth916@aol.com

Julie Roth, Executive Director
DSCSOC

Julie,

At several of the recent University of California, Davis, LEHR Superfund site RPM meetings, there have been discussions about development of institutional controls to limit activity at the LEHR site in the areas where wastes are proposed to be left at the site. As you and I have discussed, there are significant questions about this approach, with particular reference to the implementation/enforcement of any "institutional controls" at LEHR. I wish to bring to your attention a recently released United States Government Accountability Office report,

GAO, "Superfund: Better Financial Assurances and More Effective Implementation of Institutional Controls Are Needed to Protect the Public," GAO-06-900T, United States Government Accountability Office, Washington, D.C., June 16 (2006).

<http://www.gao.gov/cgi-bin/getrpt?GAO-06-900T>

This report discusses problems that the GAO has found with the way that the US EPA (and, for that matter, other agencies) attempt to implement institutional controls at Superfund sites in an effort to protect the public from residual wastes left at the site as part of site remediation. A number of the issues discussed are pertinent to issues that will need to be addressed associated with the development of institutional controls at the LEHR Superfund site. I suggest that you send this material to the RPMs and PRPs, indicating that these are issues that are of concern to DSCSOC that will need to be addressed in developing/implementing institutional controls for LEHR site waste management.

Fred

G. Fred Lee, PhD, DEE, AAEE Bd. Cert. Env. Eng.
G. Fred Lee & Associates
27298 E. El Macero Drive
El Macero, CA 95618
ph: 530 753-9630
cell: 916 712-7399
em: gfredlee@aol.com
www.gfredlee.com

GAO

Testimony

Before the Subcommittee on Superfund
and Waste Management, Committee on
Environment and Public Works, U.S.
Senate

For Release on Delivery
Expected at 9:30 a.m. EDT
Thursday, June 15, 2006

SUPERFUND

**Better Financial Assurances
and More Effective
Implementation of
Institutional Controls Are
Needed to Protect the
Public**

Statement for the Record by
John B. Stephenson, Director
Natural Resources and Environment





Highlights of [GAO-06-900T](#), a testimony before the Subcommittee on Superfund and Waste Management, Committee on Environment and Public Works, U.S. Senate

Why GAO Did This Study

Under the Environmental Protection Agency's (EPA) Superfund program, parties responsible for pollution bear the cost of cleaning it up. However, these parties sometimes no longer exist, leaving the problem for others, typically the federal government, to address. Furthermore, many sites' cleanup remedies leave some waste in place, relying on institutional controls—legal or administrative restrictions on land or water use—to limit the public's exposure.

GAO was asked to summarize the findings of its August 2005 report, *Environmental Liabilities: EPA Should Do More to Ensure that Liable Parties Meet Their Cleanup Obligations* (GAO-05-658) and its January 2005 report, *Hazardous Waste Sites: Improved Effectiveness of Controls at Sites Could Better Protect the Public* (GAO-05-163). GAO's statement addresses the actions EPA could take to better ensure that parties meet their cleanup obligations and the long-term effectiveness of institutional controls in protecting the public. GAO's reports recommended, among other things, that EPA (1) implement a financial assurance mandate for businesses handling hazardous substances; (2) enhance its oversight and enforcement of existing financial assurances and authorities; (3) ensure that the frequency and scope of monitoring of controls sufficiently maintain their effectiveness; and (4) ensure that information on controls reported in new tracking systems accurately reflects actual conditions.

www.gao.gov/cgi-bin/getrpt?GAO-06-900T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov.

SUPERFUND

Better Financial Assurances and More Effective Implementation of Institutional Controls Are Needed to Protect the Public

What GAO Found

EPA faces significant challenges in seeking to hold businesses responsible for their environmental cleanup obligations. These challenges often stem from the differing goals of environmental laws, which hold polluting businesses liable for cleanup costs and other laws which, in some cases, allow businesses to limit or avoid responsibility for these liabilities. For example, businesses can legally organize or restructure in ways that can limit their future expenditures for cleanups. They can do this by separating their assets from their liabilities using subsidiaries, for example. While many such actions are legal, transferring assets to limit liability may be prohibited under certain circumstances. Such cases, however, are difficult for EPA to identify and for the Justice Department to prosecute successfully. Notwithstanding these challenges, EPA could better ensure that bankrupt and other financially distressed businesses meet their cleanup obligations by making greater use of existing authorities. For example, EPA has not implemented a 1980 statutory mandate under Superfund to require businesses handling hazardous substances to demonstrate their ability to pay for potential environmental cleanups—that is, to provide financial assurances. Also, EPA has done little to ensure that businesses comply with the agency's existing financial assurance requirements in cleanup agreements and orders. Moreover, greater use of other existing authorities—such as tax offsets, which allow the government to redirect tax refunds it owes businesses to agencies with claims against them—could produce additional payments for cleanups from financially distressed businesses.

EPA also faces a number of challenges in ensuring the long-term effectiveness of institutional controls—legal or administrative restrictions on land or resource use to protect against exposure to residual contamination—at Superfund sites. Institutional controls were applied at most of the Superfund sites GAO examined where waste was left in place after cleanup. However, documentation of remedy decisions often did not discuss certain factors called for in EPA's guidance. Relying on institutional controls as a major component of a site's remedy without carefully considering all key factors—particularly whether controls can be implemented in a reliable and enforceable manner—could jeopardize the remedy's effectiveness. In addition, EPA faces challenges in ensuring that institutional controls are adequately implemented, monitored, and enforced. For example, EPA often does not verify that institutional controls are in place at Superfund sites where cleanup has been completed but residual contamination remains. At the time of GAO's review, EPA had begun implementing a tracking system to improve the agency's ability to ensure the long-term effectiveness of institutional controls in the Superfund program. However, the tracking system being implemented included data that were essentially derived from file reviews. These data may or may not reflect institutional controls as actually implemented, leaving in question whether the public is adequately protected from health and environmental risks

Mr. Chairman and Members of the Subcommittee:

We are pleased to have the opportunity to present the results of our recent work on the Environmental Protection Agency's (EPA) Superfund Program and, in particular, with regard to environmental liability issues and controls at sites where contamination remains in place after remediation. To protect the public's health, the Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, which established the Superfund program to clean up the most seriously contaminated hazardous waste sites in the nation. CERCLA requires that parties statutorily responsible for pollution bear the cost of cleaning up contaminated sites. In many cases, liable parties have met their cleanup responsibilities. However, parties responsible for cleaning up some Superfund sites include businesses that no longer exist, having been liquidated through bankruptcy or otherwise dissolved. Under these circumstances, companies that caused environmental contamination have left the problem for others, typically the government, to address. In addition, at many of the sites addressed under Superfund, EPA has selected cleanup remedies that leave at least some waste in place because the agency believes it is impossible, impractical, or too costly to clean up the contaminated property so that it can be used without restriction. Cleanups at such sites often rely on institutional controls—legal or administrative restrictions on the use of land or water at the site—to limit the public's exposure to residual contamination.

This statement, which is based on two recent reports on hazardous waste cleanup,¹ addresses (1) actions EPA could take to better ensure that bankrupt and other financially distressed businesses meet their cleanup obligations and (2) the long-term effectiveness of institutional controls in protecting the public against residual contamination left in place at hazardous waste sites, including Superfund sites.

Summary

In August 2005, we reported that EPA faces significant challenges in seeking to hold businesses responsible for their environmental cleanup obligations. These challenges often stem from the differing goals of environmental laws, which hold polluting businesses liable for cleanup

¹GAO, *Environmental Liabilities: EPA Should Do More to Ensure That Liable Parties Meet Their Cleanup Obligations*, [GAO-05-658](#) (Washington, D.C.: Aug. 17, 2005), and GAO, *Hazardous Waste Sites: Improved Effectiveness of Controls at Sites Could Better Protect the Public*, [GAO-05-163](#) (Washington, D.C.: Jan. 28, 2005).

costs and other laws that, in some cases, allow businesses to limit or avoid responsibility for these liabilities. For example, businesses can legally organize or restructure in ways that can limit their future expenditures for cleanups. They can do this by separating their assets from their liabilities using subsidiaries, for example. While many such actions are legal, transferring assets to limit liability may be prohibited under certain circumstances. Such cases, however, are difficult for EPA to identify and for the Justice Department to prosecute successfully. Notwithstanding these challenges, EPA could better ensure that bankrupt and other financially distressed businesses meet their cleanup obligations by making greater use of existing authorities. For example, EPA has not implemented a 1980 statutory mandate under Superfund to require businesses handling hazardous substances to demonstrate their ability to pay for potential environmental cleanups—that is, to provide financial assurances. Also, EPA has done little to ensure that businesses comply with the agency’s existing financial assurance requirements in cleanup agreements and orders. Moreover, greater use of other existing authorities—such as tax offsets, which allow the government to redirect tax refunds it owes businesses to agencies with claims against them—could produce additional payments for cleanups from financially distressed businesses. Therefore, our report recommended, among other things, that EPA (1) implement the financial assurance mandate for businesses handling hazardous substances and (2) enhance its oversight and enforcement of existing financial assurances and authorities. EPA generally agreed with many of the recommendations, stating its intent to further evaluate some of them.

Furthermore, in January 2005, we reported that EPA faces a number of challenges in ensuring the long-term effectiveness of institutional controls at Superfund sites. For example, institutional controls were applied at most of the Superfund sites we examined during our review where waste was left in place after cleanup. However, documentation of remedy decisions often did not discuss certain factors called for in EPA’s guidance. Relying on institutional controls as a major component of a site’s remedy without carefully considering all key factors—particularly whether controls can be implemented in a reliable and enforceable manner—could jeopardize the effectiveness of the remedy. In addition, EPA faces challenges in ensuring that institutional controls are adequately implemented, monitored, and enforced. For example, EPA’s monitoring of Superfund sites where cleanup has been completed but residual contamination remains often does not include verification that institutional controls are in place. At the time of our review, EPA had recently begun implementing an institutional controls tracking system for

its Superfund program to improve the agency's ability to ensure the long-term effectiveness of institutional controls. However, the tracking system being implemented included data that were essentially derived from file reviews. These data may or may not reflect institutional controls as actually implemented, leaving in question whether the public is adequately protected from health and environmental risks. To ensure the long-term effectiveness of institutional controls, our report recommended, among other things, that EPA ensure that (1) in selecting controls, sufficient consideration was given to all key factors; (2) the frequency and scope of monitoring efforts are sufficient to maintain the effectiveness of controls; and (3) the information on controls reported in a new tracking system accurately reflects actual conditions. EPA generally agreed with GAO's recommendations.

Background

Under the Superfund program, EPA may compel parties statutorily responsible for contaminated sites to clean them up or to reimburse EPA for its cleanup costs. In some cases, however, parties responsible for the contamination cannot be identified or the parties do not have sufficient financial resources to perform or pay for the entire cleanup. In the latter case, EPA often settles environmental claims with businesses for less than the cleanup costs if paying for the cleanup would present "undue financial hardship," such as depriving a business of ordinary and necessary assets or resulting in an inability to pay for ordinary and necessary business expenses. Furthermore, when parties file for bankruptcy protection, EPA's recovery of cleanup costs may be reduced or eliminated, particularly when there are few other parties with cleanup liabilities at the Superfund site.

In implementing the Superfund program, EPA uses risk management approaches, such as requiring that certain responsible parties—generally businesses—provide the agency with evidence of their ability to pay their expected future cleanup costs because the cleanups often take many years and the financial position of liable businesses can change during that time. Financial assurances are meant to assure EPA that the businesses will have the money to finish the cleanups in the future. Thus, when negotiating Superfund cleanup agreements with EPA, businesses generally agree to provide financial assurances aimed at demonstrating their ability to meet the requirements of the agreements. These financial assurances include bank letters of credit, trust funds, and, under certain conditions, guarantees that businesses or their parent corporations have the financial wherewithal to meet the obligations.

Institutional controls can be a critical component of the cleanup process at Superfund sites and may be used to ensure short-term protection of human health and the environment during the cleanup process itself as well as long-term protection once cleanup activities at the site are complete. EPA defines institutional controls as “non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use.” In December 2002, EPA issued draft guidance setting out, among other things, the key factors to be considered when evaluating and selecting institutional controls at Superfund sites and responsibilities for implementing, monitoring, and enforcing institutional controls at these sites. Under this guidance, EPA generally—although not always—requires that institutional controls be put in place at Superfund sites where total cleanup is not practical or feasible. If deemed necessary, these controls may be combined with engineering controls—such as capping or fencing—to limit exposure to residual site contamination. For example, the remedy selected for a hazardous waste landfill may include engineering controls, such as placing a protective layer, or “cap” made of clay or synthetic materials, over the contamination and also institutional controls to prohibit any digging that might breach this protective layer and expose site contaminants.

EPA Should Do More to Ensure That Liable Parties Meet Their Cleanup Obligations

While more than 231,000 businesses operating in the United States filed for bankruptcy in fiscal years 1998 through 2003, the extent to which these businesses had environmental liabilities is not known because neither the federal government nor other sources collect this information. Information on bankrupt businesses with federal environmental liabilities is limited to data on the bankruptcy cases that the Justice Department has pursued in court on behalf of EPA. In that regard, the Justice Department initiated 136 such cases from 1998 through 2003.

In seeking to hold liable businesses responsible for their environmental cleanup obligations, EPA faces significant challenges that often stem from the differing goals of environmental laws that hold polluting businesses liable for cleanup costs and other laws that, in some cases, allow businesses to limit or avoid responsibility for these liabilities. For example, businesses can legally organize or restructure in ways that can limit their future expenditures for cleanups by, for example, separating their assets from their liabilities using subsidiaries. While many such actions are legal, transferring assets to limit liability may be prohibited under certain circumstances. However, such cases are difficult for EPA to identify and for the Justice Department to prosecute successfully. In

addition, bankruptcy law presents a number of challenges to EPA's ability to hold parties responsible for their cleanup obligations, challenges that are largely related to the law's intent to give debtors a fresh start. Moreover, by the time a business files for bankruptcy, it may have few, if any, assets remaining to distribute among creditors. The bankruptcy process also poses procedural and informational challenges for EPA. For example, EPA lacks timely, complete, and reliable information on the thousands of businesses filing for bankruptcy each year.

Notwithstanding these challenges, we found that EPA could better ensure that bankrupt and other financially distressed businesses meet their cleanup obligations by making greater use of existing authorities. For example, EPA has not implemented a 1980 statutory mandate under Superfund to require businesses handling hazardous substances to demonstrate their ability to pay for potential environmental cleanups—that is, to provide financial assurances. EPA has cited competing priorities and lack of funds as reasons for not implementing this mandate, but its inaction has exposed the Superfund program and U.S. taxpayers to potentially enormous cleanup costs at gold, lead, and other mining sites and at other industrial operations, such as metal-plating businesses. Also, EPA has done little to ensure that businesses comply with its existing financial assurance requirements in cleanup agreements and orders. Greater oversight and enforcement of financial assurances would better guarantee that cleanup funds will be available if needed. Also, greater use of other existing authorities—such as tax offsets, which allow the government to redirect tax refunds it owes businesses to agencies with claims against them—could produce additional payments for cleanups from financially distressed businesses.

We made a total of nine recommendations in our August 2005 report intended to help EPA in five areas: (1) closing gaps in financial assurance coverage that expose the government to significant financial risk for costly environmental cleanups; (2) ensuring that the financial assurances EPA requires under the Superfund program provide sufficient funds for cleanups in the event liable parties do not fulfill their environmental obligations; (3) ensuring that EPA holds liable parties responsible for their cleanup obligations to the maximum extent practicable; (4) ensuring that EPA identifies relevant bankruptcy filings to pursue and bankruptcy actions to monitor; and (5) more clearly identifying some actions needed to better protect the government's interest. We specifically recommended that EPA (1) implement the financial assurance mandate for businesses handling hazardous substances and (2) enhance its oversight and enforcement of existing financial assurances and authorities. EPA

generally agreed with many of our recommendations and said that the agency will further evaluate others.

Improved Effectiveness of Controls at Superfund Sites Could Better Protect the Public

Institutional controls were applied at most of the Superfund sites we examined where waste was left in place after cleanup, but documentation of remedy decisions often did not discuss key factors called for in EPA's guidance. For example, while documents usually discussed the controls' objectives, in many cases, they did not adequately address when the controls should be implemented, how long they would be needed, or who would be responsible for monitoring or enforcing them. According to EPA, the documents' incomplete discussion of the key factors suggests that site managers may not have given them adequate consideration. Relying on institutional controls as a major component of a site's remedy without carefully considering all of the key factors—particularly whether the controls can be implemented in a reliable and enforceable manner—could jeopardize the effectiveness of the remedy.

EPA faces challenges in ensuring that institutional controls are adequately implemented, monitored, and enforced. Institutional controls at the Superfund sites we reviewed, for example, were often not implemented before the cleanup was completed, as EPA requires. EPA officials indicated that this may have occurred because, over time, site managers may have inadvertently overlooked the need to implement the controls. EPA's monitoring of Superfund sites where cleanup has been completed but residual contamination remains often does not include verification that institutional controls are in place. In addition, EPA may have difficulties ensuring that the terms of institutional controls can be enforced at some Superfund sites: that is, some controls are informational in nature and do not legally limit or restrict use of the property, and, in some cases, state laws may limit the options available to enforce institutional controls.

In our January 2005 report, we found that EPA had begun implementing an institutional control tracking system for its Superfund program in order to improve its ability to ensure the long-term effectiveness of institutional controls. The agency, however, faced significant obstacles in implementing this system. The institutional control tracking system being implemented tracked only minimal information on the institutional controls. Moreover, as configured, the system did not include information on long-term monitoring or enforcement of the controls. In addition, the tracking system being implemented included data that were essentially derived from file reviews. These data may or may not reflect institutional

controls as actually implemented, leaving in question whether the public is adequately protected from health and environmental risks. While EPA had plans to improve the data quality for the Superfund tracking system—ensuring that the data accurately reflected institutional controls as implemented and adding information on monitoring and enforcement—the first step, data verification, could take 5 years to complete.

In order to ensure the long-term effectiveness of institutional controls, our January 2005 report recommended that EPA: (1) clarify agency guidance on institutional controls to help EPA site managers and other decision makers understand in what cases institutional controls are or are not necessary at sites where contamination remains in place after cleanup; (2) ensure that, in selecting institutional controls, adequate consideration is given to their objectives; the specific control mechanisms to be used; the timing of implementation and duration; and the parties responsible for implementing, monitoring, and enforcing them; (3) ensure that the frequency and scope of monitoring at deleted Superfund sites where contamination has been left in place are sufficient to maintain the protectiveness of any institutional controls at these sites; and (4) ensure that the information on institutional controls reported in the Superfund tracking system accurately reflects actual conditions and not just what is called for in site decision documents. EPA agreed with the recommendations in the report and provided information on the agency's plans and activities to address them.

GAO Contact and Staff Acknowledgments

For further information on this statement, please contact John B. Stephenson at (202) 512-3841 or stephensonj@gao.gov. Individuals who made key contributions to this statement include Christine Fishkin, Richard P. Johnson, Jerry Laudermilk, Les Mahagen, Vincent P. Price, Nico Sloss, and Susan Swearingen.

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission

The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."

Order by Mail or Phone

The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:

U.S. Government Accountability Office
441 G Street NW, Room LM
Washington, D.C. 20548

To order by Phone: Voice: (202) 512-6000
TDD: (202) 512-2537
Fax: (202) 512-6061

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Web site: www.gao.gov/fraudnet/fraudnet.htm

E-mail: fraudnet@gao.gov

Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400
U.S. Government Accountability Office, 441 G Street NW, Room 7125
Washington, D.C. 20548

Public Affairs

Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, D.C. 20548