

June 2003

# CAPITOL HILL ANTHRAX INCIDENT

## EPA's Cleanup Was Successful; Opportunities Exist to Enhance Contract Oversight



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# Highlights

Highlights of [GAO-03-686](#), a report to the Chairman, Committee on Finance, U.S. Senate

## Why GAO Did This Study

In September and October 2001, the first cases of anthrax bioterrorism occurred in the United States when letters containing anthrax were mailed to congressional leaders and members of the news media. As the cleanup of the Capitol Hill anthrax site progressed, EPA's estimates of the cleanup costs steadily rose. GAO was asked to describe (1) the costs EPA incurred to conduct the cleanup and how it was funded, (2) the extent to which EPA awarded the cleanup contracts competitively, (3) EPA's oversight of the contractors' work and any suggested changes to EPA's contracting practices, and (4) the extent to which EPA agreed to indemnify contractors against liability for potential damages related to the cleanup.

## What GAO Recommends

To enhance EPA's contract oversight, GAO recommends that the EPA Administrator require all EPA regions to more consistently use two contract oversight practices and to examine expanding the use of another.

EPA officials agreed to implement or consider implementing GAO's recommendations. Their comments and our response are discussed at the end of this report.

[www.gao.gov/cgi-bin/getrpt?GAO-03-686](http://www.gao.gov/cgi-bin/getrpt?GAO-03-686).

To view the full report, including the scope and methodology, click on the link above. For more information, contact John Stephenson (202) 512-3841 or [stephensonj@gao.gov](mailto:stephensonj@gao.gov).

# CAPITOL HILL ANTHRAX INCIDENT

## EPA's Cleanup Was Successful; Opportunities Exist to Enhance Contract Oversight

### What GAO Found

EPA spent about \$27 million on the Capitol Hill anthrax cleanup, using funds from its Superfund program. From the outset, many uncertainties were associated with the cleanup effort, including how to remove anthrax from buildings. EPA revised its November 2001 estimate of \$5 million several times during the cleanup as the nature and extent of the contamination became fully known and the solutions to remove and properly dispose of the anthrax were agreed upon and carried out. To conduct the cleanup, EPA relied extensively on the existing competitively awarded Superfund contracts it routinely uses to address threats posed by the release of hazardous substances. Specifically, about 80 percent of the contract costs were incurred under 10 of EPA's existing Superfund contracts.

EPA dedicated significant resources to overseeing the many contractors working on the Capitol Hill anthrax cleanup—including about 50 staff from nine regional offices experienced in leading and overseeing emergency environmental cleanups. Most often, these staff ensured that the contractors were on site and performing assigned tasks efficiently. EPA also assigned an administrative specialist to ensure that contract charges were accurate and reasonable. EPA's assessment of its emergency responses to the anthrax incidents, which focused on or included the Capitol Hill site, concluded that, overall, the agency had used its contracts effectively but that it could improve some areas of its contracting support. In addition, GAO's review of the Capitol Hill cleanup revealed inconsistencies in EPA's cost oversight practices among regions. For example, EPA uses a computerized system for tracking contractor costs for hazardous substance removal contracts, but regions use the system inconsistently for the technical assessment contracts also used during emergency responses. Consistent use of the system would likely improve the quality of EPA's nationwide contract data and enhance EPA's oversight capabilities.

EPA agreed to indemnify two contractors with key roles in the fumigation of the Hart Senate Office Building with chlorine dioxide gas against liability that could have resulted if a third party had been injured by the contractors' release of a harmful substance, including anthrax.

### Cleanup Personnel Prepare Duct Work for Air Sampling



Source: EPA.

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**Abbreviations**

CDM	CDM Federal Programs Corporation
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	Environmental Protection Agency
HEPA	high efficiency particulate arresting
NCP	National Oil and Hazardous Substance Pollution Contingency Plan

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United States General Accounting Office  
Washington, DC 20548

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June 4, 2003

The Honorable Charles E. Grassley  
Chairman, Committee on Finance  
United States Senate

Dear Chairman Grassley:

Anthrax is a naturally occurring bacterium that causes acute infectious disease and is potentially fatal.<sup>1</sup> As you know, in September and October 2001, the first cases of anthrax bioterrorism occurred in the United States when letters containing a powdered form of anthrax were mailed to members of the news media and congressional leaders. On October 15, 2001, one of these letters, addressed to the former Majority Leader of the U. S. Senate, was opened in the Hart Senate Office Building in Washington, D.C. The letter had contaminated several congressional and other buildings along the mail delivery route and elsewhere, and approximately 30 congressional employees tested positive for anthrax exposure soon after. The Hart Senate Office Building is a 10-million-cubic-foot building that houses the offices and staffs of 50 senators. As a result of the anthrax contamination, the Hart Building and several others on Capitol Hill were closed.

In consultation with the leadership of the Congress, the U.S. Capitol Police Board—which oversees the security of the Capitol complex—established a team led by an independent “incident commander” to coordinate the response to the anthrax incident among several federal and local agencies. The team determined that the congressional offices should be decontaminated and reopened as expeditiously as possible so that the operations of the legislative branch would not be impeded. The Environmental Protection Agency (EPA), which removes hazardous substances under its Superfund program, had a significant role in the cleanup.

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<sup>1</sup>Technically, the term “anthrax” refers to the disease caused by the spore-forming bacterium, *Bacillus anthracis*, and not the bacterium or its spores. In this report, we use the term to refer to the bacterium and its spores to reflect terminology commonly used in the media and by the general public.

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As the cleanup of the Capitol Hill anthrax site progressed, EPA's estimates of its cost steadily increased. Consequently, you asked us to examine several aspects of EPA's cleanup. This report describes (1) the costs EPA incurred to conduct the Capitol Hill anthrax cleanup and how the costs were funded, (2) the extent to which EPA awarded the anthrax cleanup contracts competitively, (3) EPA's oversight of the work performed by contractors and any suggested changes to EPA's contracting processes, and (4) the extent to which EPA agreed to indemnify contractors against liability for potential damages related to the cleanup.

To conduct our work, we sought contracting documentation relevant to the anthrax cleanup from EPA. However, delays in receiving much of this documentation considerably extended the time necessary to complete our work. Factors contributing to the delay included the need to negotiate and then to implement a process established by the Capitol Police Board and EPA to address their respective concerns. The Capitol Police Board was concerned that the EPA documents might contain sensitive security information, and EPA thought that the documents might contain confidential business information that it was not authorized to release to the Capitol Police Board. As the first step in the process, EPA established a reading room for GAO staff to preliminarily review the documents. After this review, EPA screened the documents for confidential business information and gave them, with certain information redacted, to the Capitol Police Board so it could screen for security issues and redact sensitive information. After the EPA and Capitol Police Board reviews, which took more than 3 months, the documents were given to us. In part because of delays in obtaining this contracting information, we surveyed 63 EPA personnel the agency had identified as having provided contractor oversight for the cleanup to obtain information on their oversight roles. We received survey responses from 56 people, a response rate of 89 percent. Our scope and methodology for this review are presented at the end of this report.

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## Results in Brief

EPA spent approximately \$27 million to clean up anthrax contamination on Capitol Hill, using funding from its Superfund program. To conduct the anthrax contamination assessments and the actual decontamination, EPA retained the services of many more contractors than it would typically use for a single Superfund cleanup site. Specifically, EPA paid 27 contractors and three federal and state agencies about \$25 million for the Capitol Hill anthrax cleanup; the remaining \$2 million covered EPA's personnel costs, including travel, primarily for the staff who supervised the contractors. In fiscal year 2002, the Congress appropriated about \$23 million to replenish

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a substantial portion of the Superfund monies EPA had spent. From the outset in October 2001, many uncertainties were associated with the cleanup effort, including how to remove anthrax from buildings and how much the cleanup would cost. As the nature and extent of the contamination became fully known and the solutions to remove and properly dispose of the anthrax were agreed upon and carried out, EPA's November 2001 estimate of \$5 million proved to be a fraction of what was actually needed to conduct the cleanup. With the dedication of substantial resources and funding to the cleanup, the objective of reopening the decontaminated Capitol Hill office buildings as soon as was safely possible was achieved in about 3 months. In contrast, some other buildings that were also contaminated with anthrax in the fall of 2001, such as the Brentwood postal facility, remain closed as of May 2003.

Because EPA relied extensively on the existing competitively awarded Superfund contracts it routinely uses to address threats posed by the release or threatened release of hazardous substances, about 80 percent of the contract costs for the Capitol Hill anthrax cleanup were incurred under competitively awarded technical assessment or hazardous substance removal contracts. Specifically, EPA used 10 of its existing competitively awarded contracts and 2 new competitively awarded supply and security contracts for additional support. Most of the 15 contracts that were not competitively awarded were sole-source contracts for under \$200,000 to obtain supplies and technical, laboratory, and security services or to support existing removal contracts. EPA's Office of Acquisition Management authorized the use of sole-source contracts for the cleanup on the basis that the emergency situation created an urgent and compelling need to obtain services and supplies without going through the generally more time-consuming competitive bidding process. For additional assistance, EPA also entered into agreements with the U.S. Coast Guard, the Department of the Army, and the State of Maryland Department of the Environment.

EPA dedicated significant staff resources to overseeing the many contractors working on the Capitol Hill anthrax cleanup to ensure that their assessment and cleanup work was appropriate and the charges were accurate and reasonable. About 150 EPA staff participated in the cleanup, including about 50 staff from nine regional offices—called on-scene coordinators—who have experience in leading and overseeing emergency environmental cleanup operations. The on-scene coordinators oversaw, and sometimes assisted with the work of, the contractors during shifts that ran 24 hours a day, 7 days a week, for about 3 months. The tasks of the on-scene coordinators varied but most often included ensuring that the

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contractors were on-site and performing assigned tasks efficiently. In addition, EPA assigned an administrative specialist to ensure that contract charges were accurate and reasonable. This individual reviewed the daily charges for four removal contracts, which represented about 41 percent of the total contract costs. EPA has conducted four assessments of its emergency responses to the anthrax incidents, focusing on or including the Capitol Hill site. Overall, these assessments indicated that EPA used its contracting capabilities effectively, but they also identified areas in which EPA could improve contract support, and EPA has begun taking steps to do so. Moreover, our work on the Capitol Hill cleanup revealed areas in which oversight of contract costs was not consistent among the regions and might be improved. For example, while EPA uses a computerized system for tracking contractor costs for removal contracts, this system is used on a limited basis for technical contracts that are also used for cleanups. If the system—which provides up-to-date cost information organized in consistent categories, such as equipment and travel—were used consistently, the quality of EPA’s nationwide contract data would be improved and its oversight capabilities would likely be enhanced. Toward this end, we are recommending that EPA require all the regions to more consistently use certain of the practices now used in only some regions.

EPA agreed to indemnify two contractors that had key roles in the fumigation of the Hart Senate Office Building with chlorine dioxide gas against liability that could have resulted if a third party had been injured by the contractors’ release of a harmful substance, including anthrax and chlorine dioxide. Although one of the contractors worked at the site while negotiating with EPA for indemnification against such liability, the other contractor would not start removal procedures without first receiving indemnification. Following 4 weeks of negotiations, EPA reached agreement on indemnification with this contractor in November 2001. Because the negotiation process occurred at the same time that testing was being performed offsite to determine the proper decontamination methods to use at the Hart Senate Office Building, the month-long negotiation process did not delay the cleanup. However, it potentially could have done so. As a result, two of EPA’s assessments of its responses to the 2001 terrorist attacks recommended expanding contractor indemnification to address counter-terrorism response activities.

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## Background

The Capitol Hill anthrax incident occurred a month after the terrorist attacks on the World Trade Center and the Pentagon, while EPA and other federal agencies were continuing to respond to these attacks. The Capitol Police Board, which governs the U.S. Capitol Police Force, led the anthrax



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cleanup at the Capitol Hill site.<sup>2</sup> Consisting at the time of our review of the House and Senate Sergeants-at-Arms and the Architect of the Capitol, the Board oversees the security of members of the Congress and the Capitol buildings, such as the congressional office buildings. The federal entities involved in the cleanup—including EPA, the Federal Emergency Management Agency, the Centers for Disease Control and Prevention, the U.S. Coast Guard, and the Department of the Army—reported to an incident commander who was appointed by the Capitol Police Board to make decisions on the day-to-day activities of the cleanup. The period from October 20, 2001, to November 13, 2001, is characterized as the emergency phase, which focused on identifying the extent of anthrax contamination; this was followed by the remedial, or cleanup, phase.

Reporting to the Capitol Police Board’s incident commander, EPA managed the decontamination aspects of the cleanup. EPA’s activities at the Capitol Hill site included

- working with other agencies and entities to evaluate the effectiveness of potential disinfectants and cleanup technologies,
- isolating areas to prevent the spread of contamination,
- sampling to determine and confirm the extent of contamination (see fig. 1),
- evaluating sampling results,
- removing critical items for special decontamination procedures, and
- cleaning up the contaminated areas and disposing of decontaminated items.

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<sup>2</sup>The cleanup decisions were authorized by EPA in “action memoranda” the agency uses for Superfund response decisions.

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**Figure 1: A Sample Is Inserted into a Vial in the Hart Senate Office Building**



Source: EPA.

At the Capitol Hill site, EPA sampled both surfaces and air in the buildings for the presence of anthrax, using three types of surface samples (wet swabs and wipes for nonporous surfaces and high efficiency particulate arresting (HEPA) vacuuming for porous materials) and four types of air samples. Four methods were used to remove anthrax found in congressional buildings: fumigating with chlorine dioxide gas, an antimicrobial pesticide; disinfecting with a liquid form of chlorine dioxide; disinfecting with Sandia foam;<sup>3</sup> and using HEPA vacuuming (see fig. 2). During the cleanup, chlorine dioxide gas was identified as the best available fumigant for decontaminating parts of the Hart Senate Office Building, as well as for fumigating mail and packages. EPA oversaw the use of chlorine dioxide gas during three fumigation events in the Hart building.

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<sup>3</sup>Sandia foam is a decontaminant that neutralizes chemical and biological agents.

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**Figure 2: Cleanup Personnel Use a HEPA Vacuum in a Congressional Office**



Source: EPA.

In addition, contractors removed items from congressional offices that were critical to congressional operations or personal effects of significance. These items were bagged, tagged, and moved for off-site decontamination. Approximately 3,250 bags of critical items were transported to a company in Richmond, Virginia, for decontamination treatment using ethylene oxide. Approximately 4,000 packages and other mail were collected from the mail rooms in congressional office buildings and also transported off site for decontamination using chlorine dioxide gas. In addition, drums of mail were sent to a facility in Lima, Ohio, for irradiation treatment.

The Capitol Hill anthrax cleanup site included 26 buildings, most of them located in or near the Capitol Hill area of Washington, D.C. The buildings

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that required testing for anthrax contamination included congressional and judicial buildings; mail facilities; and other nearby buildings, such as the Library of Congress. Initial sampling was conducted along the route traveled by the letter opened in the Hart Building by tracing the route back to the Dirksen Senate Office Building (where the mail for the Senate is processed), to the P Street Warehouse (a restricted mail inspection facility overseen by the Capitol Police where congressional mail is inspected), and finally to the Brentwood postal facility (the U.S. Postal Service mail processing and distribution center for Washington, D.C.).<sup>4</sup>

Samples from 7 of the 26 buildings were found to contain anthrax, which required that these 7 undergo more thorough sampling, followed by decontamination, and followed then by resampling to confirm that the anthrax had been eradicated. In total, approximately 10,000 samples were taken at the Capitol Hill site, about half of them from locations in the Hart Senate Office Building. EPA advised the Capitol Police Board's incident commander about the extent to which buildings needed to be cleaned to make them safe. EPA, along with the Centers for Disease Control and Prevention, the Agency for Toxic Substances and Disease Registry, the National Institute for Occupational Safety and Health, and other relevant authorities, determined that the cleanup standard that would be fully protective of public health and the environment was "no detectable, viable anthrax spores." The seven buildings that required decontamination were the Dirksen, Hart, and Russell Senate Office Buildings; the Ford and Longworth House Office Buildings; the U.S. Supreme Court Building; and the P Street Warehouse. Six of the seven buildings were cleared for reentry by the end of January 2002. The P Street Warehouse was cleared for reentry in March 2002. According to the lead EPA on-scene coordinator, no one became sick as a result of exposure to anthrax or chemical agents used during decontamination.

EPA performed its work on the Capitol Hill anthrax cleanup under its Superfund program pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP). Provisions of CERCLA, as amended, promote a coordinated federal, state, and local response to mitigate situations at sites that may pose an imminent and

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<sup>4</sup>The Brentwood Processing and Distribution Center was renamed the Joseph Curseen, Jr., and Thomas Morris, Jr., Processing and Distribution Center in September 2002 in honor of two postal employees who died as a result of anthrax exposure at the facility. The facility is still commonly referred to as Brentwood.

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substantial threat to public health or the environment. The NCP is the federal government's blueprint for responding to both oil spills and hazardous substance releases. It requires that an on-scene coordinator manage the federal response at the scene of a discharge of oil or a release of a hazardous substance that poses a threat to public health or the environment. The on-scene coordinator coordinates all federal efforts with, and provides support and information to, local, state, and regional response communities. Depending on where an incident occurs, the on-scene coordinator may be either an EPA or U.S. Coast Guard employee. EPA's Superfund work typically involves using agency personnel and contractors from 1 of 10 EPA regions located throughout the country that have experience with the hazardous substances involved in the incident and the methods required to remove them.

Removal actions are generally short-term, relatively inexpensive responses to releases or threats of releases of hazardous substances, pollutants, or contaminants that pose a danger to human health, welfare, or the environment. CERCLA generally limits the cost of a removal action to \$2 million and the duration to 1 year. However, CERCLA exempts certain removal actions from these limitations, such as when continued response is required immediately to prevent, limit, or mitigate an emergency. EPA approved an emergency exemption to the \$2-million statutory limit for the Capitol Hill anthrax cleanup on November 5, 2001.

Typically, EPA provides one on-scene coordinator for a removal site to perform an initial assessment of the cleanup work needed, monitor the more detailed technical assessment and cleanup work being performed by EPA personnel and one or two contractors, and evaluate the results. However, the Capitol Hill site response was different from most hazardous materials emergency responses in its size and complexity, the nature of the contamination, and the requirement that the closed congressional buildings be reopened as soon as possible. As a result, EPA had to use a large number of on-scene coordinators, major contracts, and other federal agencies for assistance. In this case, EPA's Mid-Atlantic Regional Office (Region III) provided the lead on-scene coordinator, who led the agency's cleanup efforts. Region III, along with eight other regions, also provided about 50 other on-scene coordinators. Further, unlike most EPA cleanups, the lead on-scene coordinator was not in charge of the overall operations but instead reported to the incident commander, who in turn reported to the Capitol Police Board and House and Senate leaders.

A substantial portion of the cleanup work at the Capitol Hill site was performed from October 2001 through January 2002, with most of the

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remaining work finished by April 2002. However, some additional costs have been incurred, and EPA personnel continued to work on activities related to the cleanup after April 2002. For example, the final disposal of items used at the cleanup continued after the buildings had been reopened. In addition, EPA conducted several internal reviews to identify lessons learned from this experience to help the agency prepare for responses to other potential biological or chemical weapons attacks.

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## EPA Spent About \$27 Million of its Superfund Money to Clean Up the Capitol Hill Anthrax Site

According to EPA, the agency expended about \$27 million on the Capitol Hill anthrax cleanup, using Superfund program funding.<sup>5</sup> Through fiscal year 2002 supplemental appropriations acts, the Congress provided EPA with additional funding for activities related to terrorism, and EPA allocated about \$23 million of these funds to reimburse the Superfund program for expenditures associated with the Capitol Hill anthrax cleanup. Overall, EPA dedicated what it describes as unprecedented resources—contract staff and EPA personnel—to accomplish the cleanup of the anthrax site safely and effectively. Ninety-three percent of the \$27 million in costs were incurred primarily by EPA contractors who, among other things, conducted technical assessments and performed the decontamination tasks at the various Capitol Hill sites; the remaining 7 percent of costs were incurred by EPA personnel, largely for planning and overseeing the work of the contractors in accordance with the direction provided by the Capitol Police Board.

Over the course of the cleanup, EPA revised its cost estimates several times as the nature and extent of the contamination became fully known and the solutions for removing and properly disposing of the anthrax were agreed upon and carried out. EPA's various cost estimates covered the contracts and government agreements and generally do not include the payroll and travel costs associated with EPA personnel assigned to the Capitol Hill site. In November 2001, EPA increased its initial estimate for the cleanup to \$5 million—more than doubling the initial statutory limit of \$2 million. EPA revised its estimate for the cleanup five more times to continue work necessary to control and mitigate the threat of release of anthrax to the environment and to properly dispose of pollutants and

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<sup>5</sup>The expenditures reported are as of March 14, 2003, and were paid under total obligations of about \$30 million. Obligations are contracts awarded, services received, and similar transactions during a given period that will require payment during the same or future period.

contaminants from the site. The last revision—an increase from \$25 million to \$28 million—occurred in June 2002. (See table 1.)

**Table 1: EPA Estimated Contract and Government Agreement Cost Increases for the Capitol Hill Anthrax Cleanup**

Dollars in millions

<b>Date approved</b>	<b>Amount of increase</b>	<b>New estimated contract cost</b>
November 5, 2001	<sup>a</sup>	\$5
December 5, 2001	\$4	9
December 18, 2001	3	12
January 16, 2002	8	20
February 14, 2002	5	25
June 6, 2002	3	28

Source: EPA.

<sup>a</sup>EPA first authorized spending in excess of the \$2 million statutory limit in a November 5, 2001, action memorandum.

EPA adjusted its projections during the course of the cleanup as a result of a number of factors generally related to the uniqueness of the situation—the first use of anthrax as a terrorist weapon in this country. EPA had not addressed anthrax contamination in buildings previously and protocols for responding to contamination by anthrax or other biological agents did not exist. In addition, some scientific and technical information needed to properly plan and conduct the anthrax cleanup was not readily available; and EPA did not, at that time, have registered antimicrobial agents approved for use against anthrax. Also, EPA had not compared the costs of candidate decontamination methods. Further, much was—and still is—unknown about the properties of lab-produced anthrax such as that used in this incident, which led to uncertainties about the health risks posed by the contamination and how it could spread. As a result, EPA and contractors had to develop plans for decontaminating large areas within buildings with limited practical knowledge; search for decontamination methods; assess their likely efficacy; implement them; and, at times, repeat the process if the methods did not work. Finally, EPA was one of a number of participants in the decisions made about the work to be done, the timing of the work, and the resources needed; it was not the primary decision maker as it would be in a typical Superfund cleanup.

As EPA and contractor staff were beginning their work at the Capitol Hill anthrax site, the limitations of existing knowledge about the health risks associated with anthrax—such as what amount of exposure could cause

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illness or death—were becoming more clear. That the Capitol Hill site was potentially riskier than initially believed became evident when workers in the postal facilities where anthrax-laced letters were processed became ill; two of them subsequently died of inhalation anthrax. The scientific and medical information initially available to EPA and other agencies indicated that workers in postal facilities were not at risk of infection. Further, an elderly Connecticut woman—who may have been exposed to mail that had been contaminated with anthrax—died from anthrax inhalation, and a New York woman whose exposure to anthrax could not be linked to any mail or mail facilities also died.<sup>6</sup>

To accomplish the cleanup safely in the midst of significant scientific and technical uncertainty and changing information about how anthrax spreads, EPA called on about 150 of its staff in headquarters and the regions, incurring agency payroll and travel costs of \$1.9 million<sup>7</sup>—payroll costs amounted to \$1.3 million and travel costs to about \$600,000.<sup>8</sup> According to our analysis of EPA’s Office of the Chief Financial Officer records, the majority of payroll and travel costs were incurred by on-scene coordinators from EPA’s regions who were overseeing and assisting on the cleanup. Further, EPA employed 27 contractors and obtained further support from three government agencies at a total cost of about \$25 million to provide assessment and cleanup services. These costs are discussed in the next section.

Because of the magnitude and urgency of the health threat and the high priority placed on reopening the congressional buildings as soon as possible to mitigate disruptions to the functioning of the federal government, the Capitol Hill anthrax cleanup conducted by EPA and other federal agencies was accomplished fairly quickly, with the majority of contaminated buildings opened for business in about 3 months. Without

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<sup>6</sup>Including the four fatalities discussed, the letters contaminated with anthrax caused 23 illnesses and resulted in five deaths.

<sup>7</sup>We did not validate the personnel costs reported by the Office of the Chief Financial Officer. These costs may be somewhat understated because documents we reviewed showed that at least five of the on-scene coordinators who worked at the Capitol Hill anthrax cleanup for 3 weeks or less were not identified by EPA as having their hours worked and/or transportation expenses assigned to the cleanup job.

<sup>8</sup>According to EPA officials, the agency decided to allocate direct personnel costs (salaries and travel expenses) to the anthrax cleanup but not indirect costs, such as contract management support, which it normally allocates to Superfund cleanups. Under the Superfund program, EPA seeks to recover costs from the responsible party or parties.

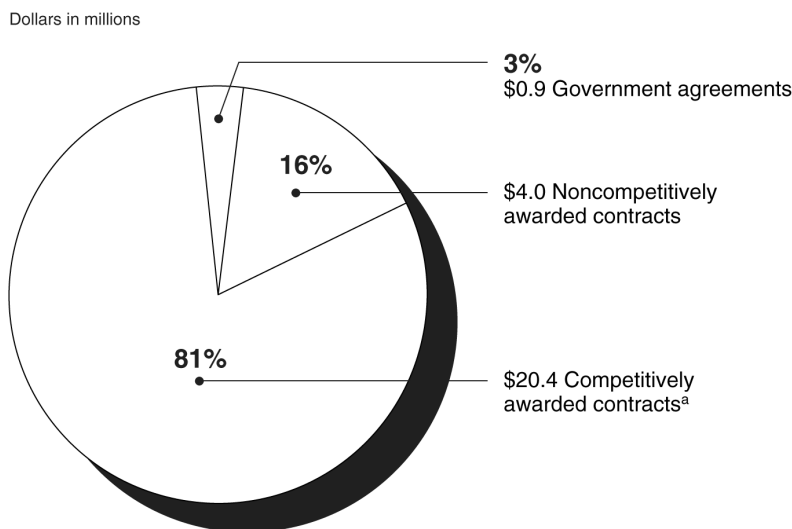


the emphasis on reopening the buildings, for example, the cleanup site likely would not have been operated around the clock, 24/7, for months. In contrast, testing and decontamination of some buildings at other sites have taken much longer. For example, fumigation of the Brentwood postal facility was completed in March 2003, and this facility had not reopened as of May 2003. In addition, a news media building in Boca Raton, Florida, where the first letter containing anthrax was received in September 2001, remained closed as of May 2003.

## EPA Competitively Awarded Most Major Contracts Used in the Anthrax Cleanup

Almost all of the cleanup expenses—81 percent—paid to EPA’s 27 contractors and 3 government agencies were incurred under competitively awarded contracts. For example, \$20.3 million of the approximately \$25 million total expenditures under contracts and government agreements were incurred under 10 existing, competitively awarded contracts that EPA routinely uses under the Superfund program to respond to releases or the threat of releases of hazardous substances, pollutants, or contaminants that may present imminent and substantial danger to the public health or welfare. Most of the contracts that were not competitively awarded cost less than \$200,000 and provided supplies and technical services. For additional assistance, EPA also entered into agreements with two federal agencies and one state agency. (See fig. 3.)

**Figure 3: Breakout of EPA Contract and Government Agreement Costs**



Source: GAO analysis of EPA data.

<sup>a</sup>The competitively awarded contracts include \$20.3 million expended under 10 existing contracts and about \$0.1 million under 2 contracts awarded during the cleanup.

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## Competitively Awarded Superfund Contracts

When responding to a release of hazardous substances, EPA first relies on its existing Superfund contracts. The Competition in Contracting Act of 1984 generally requires contracting agencies to obtain full and open competition through the use of competitive procedures, the dual purposes of which are to ensure that procurements are open to all responsible sources and to provide the government with the opportunity to receive fair and reasonable prices. In order to respond to emergencies involving releases of hazardous substances quickly, EPA issues competitively awarded multiyear Superfund contracts so that contractors with the necessary expertise are available on short notice when needed. The 10 EPA regions each negotiate and manage these Superfund contracts for work in their geographic area.

EPA generally uses two types of contracts in an emergency response:

- technical contracts provide technical assistance for EPA's site assessment and removal activities, and
- removal contracts provide emergency, time-critical removal services.

EPA used 10 existing, competitively awarded Superfund contracts for most of the technical assessment and anthrax removal at the Capitol Hill site: 4 technical contracts, 4 removal contracts, 2 other contracts that provided specific technical services and support; and issued 2 additional contracts for security services and supplies that were competitively awarded. (See table 2.) The 10 existing contracts had been in place for up to 4 years when the anthrax incident occurred.<sup>9</sup> While EPA's Region III issued the Superfund contracts that incurred the most costs for the Capitol Hill anthrax cleanup, contracts from other regions were also used to augment Region III contracting resources. The 10 existing Superfund contracts accounted for \$20.3 million—or about 80 percent—of the total contract and government agreement costs for the Capitol Hill cleanup.

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<sup>9</sup>Most of these contracts are awarded for 5-year terms.

**Table 2: Competitively Awarded Superfund Contracts Used for the Capitol Hill Anthrax Cleanup**

<b>EPA Superfund contract</b>	<b>Contract purpose</b>	<b>Obligated amount</b>	<b>Expended amount<sup>a</sup></b>
IT Corporation	Removal	\$4,800,000	\$3,924,566
Tetra Tech EM, Inc.	Technical	4,497,205	4,397,083
Earth Tech, Inc.	Removal	3,751,700	3,380,143
Environmental Quality Management, Inc.	Removal	3,100,000	2,848,095
CDM Federal Programs Corporation	Support	2,500,000	2,075,436
Roy F. Weston, Inc.	Technical	1,495,320	1,424,415
Ecology & Environment, Inc.	Technical	1,055,261	1,039,601
Lockheed Martin	Support	1,000,000	1,000,000
Guardian Environmental Services, Inc.	Removal	200,000	116,184
URS Operating Services, Inc.	Technical	91,423	91,423
MVM Security & Staffing Services	Security services	87,562	87,562
TSI, Inc.	Supplies	7,520	7,520
<b>Total</b>		<b>\$22,585,991</b>	<b>\$20,392,028</b>

Source: EPA's Office of the Chief Financial Officer.

<sup>a</sup>Expenditures as of March 14, 2003.

The four EPA technical contracts for the Capitol Hill anthrax cleanup, among other things, provided decontamination plans and sampled for anthrax in buildings. According to an EPA contracting official in Region III, technical contracts typically account for about 10 percent of total contract costs at a cleanup site. However, technical contracts costs for the Capitol Hill site totaled about \$7 million—or about 28 percent of the total contract costs.

The four EPA removal contracts for the Capitol Hill anthrax cleanup provided personnel, equipment, and materials to remove items from the site for safekeeping, decontaminate areas where anthrax was found, and dispose of contaminated items. These removal contracts also provided equipment and personnel to conduct sampling because of the large amount of samples that were required and the short time frames involved. The four EPA removal contract costs totaled about \$10 million.

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The other existing EPA contracts provided either specific technical services or support. One contract, which provides engineering and analytical services to EPA, monitored the air to ensure that potentially harmful decontamination chemicals were not released outside the area in which they were being used. Another contract, typically used for long-term Superfund cleanups known as remedial cleanups, provided additional technical support, including sampling analysis and data evaluation at the site. These two contracts totaled \$3 million.

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### Noncompetitively Awarded Contracts

Federal contracting laws that generally require EPA to use a competitive bidding process permit some exceptions to this requirement, including emergency situations where there is an unusual or compelling urgency for obtaining the necessary supplies or services. On this basis, in November 2001, EPA's Office of Acquisition Management gave the EPA contracting officers the authority to enter into contracts for the Capitol Hill anthrax site without using the normal competitive bidding process. Overall, EPA used 15 noncompetitively awarded contracts—that is, sole-source contracts—for supplies and for technical, removal, and laboratory services to support the cleanup of the Capitol Hill anthrax site. As shown in table 3, costs for three of the sole-source contracts exceeded \$200,000, and many of them were for considerably less.

**Table 3: Noncompetitively Awarded EPA Contracts Used for the Capitol Hill Anthrax Cleanup**

<b>Contract</b>	<b>Contract purpose</b>	<b>Obligated amount</b>	<b>Expended amount<sup>a</sup></b>
Kemron Environmental Services, Inc. <sup>b</sup>	Removal	\$2,421,800	\$2,119,650
HMHTTC Response Team, Inc.	Removal	900,000	900,000
Southwest Research Institute	Laboratory	383,085	383,085
University of California—Berkeley Sponsored Projects Office	Technical	182,075	182,075
Silva Consulting Services, LLC	Technical	165,000	158,100
Science Applications International Corporation <sup>b</sup>	Technical	132,359	28,630
Biomarine, Inc.	Supplies	81,147	65,647
Envirofoam Technologies, Inc.	Supplies	52,405	52,405
Safeware, Inc.	Supplies	49,450	49,450
Airgas Safety	Supplies	31,756	30,992
Sabre Oxidation Technologies, Inc.	Technical	21,950	19,850
U.S. Art Company, Inc.	Technical	12,842	12,842
Mine Safety Appliances <sup>b</sup>	Supplies	12,446	12,446
Coastal Safety & Health Services, Inc.	Supplies	11,025	11,025
New Horizons Diagnostics Corporation	Supplies	5,717	5,717
<b>Total</b>		<b>\$4,463,057</b>	<b>\$4,031,914</b>

Source: EPA's Office of the Chief Financial Officer.

<sup>a</sup>Expenditures as of March 14, 2003.

<sup>b</sup>GSA federal supply schedule contract.

The largest noncompetitive contract used for the cleanup was with Kemron Environmental Services, Inc. Kemron provided EPA with HEPA vacuuming services, one of the four methods used to remove anthrax at the Capitol Hill site. EPA obtained the services of Kemron under the GSA federal supply schedule, relying on GSA's determination that the prices

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offered under the GSA contract were fair and reasonable.<sup>10</sup> The second largest noncompetitive contract was with the removal contractor HMHTTC Response Team, which provided additional workers in December 2001 to relieve the removal contractors who had worked at the site since October. The other sole-source contract over \$200,000 was with Southwest Research Institute, a laboratory that analyzed spore strips used to test for anthrax after the decontamination efforts. This particular laboratory was selected because it was familiar with the protocol developed by the technical consultant who developed the spore strips. In addition, according to EPA officials, the lab could handle the quantity of spore strips the cleanup generated, it promised a quick turnaround time, and the fee was reasonable.

The other noncompetitively awarded contracts used at the Capitol Hill site were for supplies needed for the contractors working at the site, such as respirators, air quality meters, and sampling kits, and for technical and removal and laboratory services. For example, one technical contractor, U.S. Art Company, Inc., provided advice regarding the removal and decontamination of art objects in the Capitol Hill buildings.

Appendix I provides details on the tasks performed under the competitively and noncompetitively awarded contracts.

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## Agreements with Government Agencies

EPA obtained further support through two federal interagency agreements and one state agreement. EPA amended an existing interagency agreement with the U.S. Coast Guard to respond quickly to the Capitol Hill anthrax contamination. The U.S. Coast Guard National Strike Force provided tactical entry teams, specialized equipment, management support, and a deputy to the incident commander during the emergency phase of the cleanup. EPA also entered into a new interagency agreement with the U.S. Department of the Army for waste incineration services at Fort Detrick, Maryland. In addition, EPA used the State of Maryland Department of the

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<sup>10</sup>Under the Federal Supply Schedule, GSA awards contracts to multiple companies supplying comparable products and services after determining that the prices negotiated were fair and reasonable. Federal agencies may use the supply schedule to purchase commercial services requiring a statement of work but are responsible for determining that the total contract prices are fair and reasonable, considering the level of effort and mix of labor skills needed to perform specific tasks. Agencies ordering services that require a statement of work are to transmit their requests for services to at least three contractors. However, EPA awarded this contract without soliciting bids from three contractors on the basis that there was an unusual and compelling need to obtain the services without delay.

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Environment to review work plans and help coordinate EPA's removal and disposal of anthrax. (See table 4.)

**Table 4: Agreements with Federal and State Agencies Used for the Capitol Hill Anthrax Cleanup**

Entity	Obligated amount	Expended amount <sup>a</sup>
U.S. Coast Guard	\$900,000	\$635,254
Department of the Army-U.S. Medical Command	274,141	241,141
State of Maryland Department of the Environment	1,500	1,500
<b>Total</b>	<b>\$1,175,641</b>	<b>\$877,895</b>

Source: EPA's Office of the Chief Financial Officer.

<sup>a</sup>Expenditures as of March 14, 2003.

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## EPA Devoted Extensive Resources to Overseeing Contractors' Work, yet Some Contracting Changes Would Better Support EPA Cleanups

EPA dedicated significant staff resources to overseeing the many contractors working on the Capitol Hill anthrax cleanup. Specifically, about 50 EPA staff ensured the contractors were on site and performing assigned tasks appropriately. In addition, EPA assigned an administrative specialist to ensure contract charges were accurate and reasonable. After the cleanup, EPA assessed its response to the Capitol Hill anthrax incident and concluded that, overall, it had effectively used its contracting resources. However, EPA also identified ways it could improve contract support for potential future emergency responses. Moreover, our review of the Capitol Hill anthrax incident revealed inconsistencies in oversight practices that could affect the quality of EPA's contract cost oversight, such as the extent to which regions use the computerized cost-tracking system, the extent to which they assign dedicated administrative specialists to cleanup sites to oversee costs, and regions' varying approaches to reviewing cost reports for technical contracts.

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## Staff Oversaw Contractors' Work to Ensure It Was Appropriate and Charges Were Accurate and Reasonable

EPA used emergency technical assessment and hazardous substance removal contractors to conduct the cleanup and dedicated significant staff resources to overseeing their work. Reporting to the Capitol Police Board, EPA staff provided extensive technical expertise in anthrax detection and removal to ensure that the Capitol Hill cleanup protected public health and the environment. In all, according to EPA's Office of the Chief Financial Officer's payroll list, about 150 EPA staff participated in the anthrax

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cleanup, including about 50 staff from nine regional offices who are experienced in leading and overseeing emergency environmental cleanup operations—the on-scene coordinators—and several staff from EPA’s Environmental Response Team who also have experience in emergency cleanup operations.<sup>11</sup>

The on-scene coordinators oversaw, and sometimes assisted with, the work of the contractors during shifts that ran 24 hours a day, 7 days a week, for about 3 months. Fifty-six EPA staff whose responsibilities at the Capitol Hill site included overseeing contractors responded to our survey about the oversight activities they performed. They reported that their tasks varied but that the task they most frequently carried out was overseeing contractors.<sup>12</sup> Specifically, the EPA respondents to our survey spent, on average,

- 53 percent of their time overseeing contractors;
- 18 percent researching and developing technical plans;
- 13 percent coordinating with other federal agencies on the administration of the cleanup; and
- 14 percent on “other activities,” such as conducting pilot studies for the decontamination effort, sampling for anthrax, and organizing and administering cleanup activities.

The EPA staff who reported overseeing contractors spent, on average, 54 percent of their time observing contractors to ensure they were on site and working on assigned tasks efficiently. These staff also spent, on average, 17 percent of their time reviewing the results of contractors’ work, and 8 percent of their time preparing daily or weekly work plans. Less frequently, staff who reported oversight activities also monitored delivery and quality of supplies, reviewed cost documents, and approved hours worked by contract personnel.

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<sup>11</sup>The Environmental Response Team assists EPA regions and other federal agencies responding to environmental emergencies by providing a wide range of technical expertise and equipment.

<sup>12</sup>Forty-six of the survey respondents were on-scene coordinators.



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While EPA staff who reviewed cost documents spent, on average, 3 percent of their time reviewing cost documents, one person—a site administrative officer—spent 100 percent of his time reviewing cost documents. As discussed in the following section, Region III generally uses site administrative officers to review both technical and removal contract costs in detail and to document these reviews before the on-scene coordinator reviews and approves them, thereby easing the cost-review workload of on-scene coordinators and allowing them to focus more on other cleanup management tasks and issues.

At the Capitol Hill anthrax site, the site administrative officer reviewed the daily charges for four of the six removal contracts, which represented about 41 percent of the total contract costs.<sup>13</sup> These reviews involved verifying the hours the contractor staff worked by comparing the hours billed with the hours recorded in sign-in sheets; reviewing travel costs to ensure they were within federal guidelines and reviewing other expenditures of contractor staff, such as telephone charges to ensure they were allowable. The review work papers provide documentation of the cost reviews performed.

According to EPA officials, the technical contractors did not have sufficient staff on site to provide daily cost reports, and the site administrative officer, therefore, did not review the daily costs of the technical contracts at the Capitol Hill site. EPA requires reviews of the monthly cost reports from technical contractors before they are approved for payment by project officers in the regions; the reviews are generally performed by the on-scene coordinator at the site. However, we could not determine the extent to which the costs of the largest technical contract, which was managed by Region III, were reviewed by on-scene coordinators at the Capitol Hill site because the project officer responsible had retired, and EPA staff could not locate any documentation of reviews that had been requested or performed. As discussed further below, Region III implemented a new review process in 2002 that requires such documentation.

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<sup>13</sup>The site administrative officer did not review the costs associated with the other two removal contracts—a GSA federal supply contract and a noncompetitive contract awarded for a limited period of time—on a daily basis because the contractors had not input these into the computerized cost tracking system used for the review.

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EPA's Assessments of Its Response to the Capitol Hill Anthrax Incident Identified Contracting Issues, Which EPA Is Addressing

EPA conducted four assessments that either focused on or included the Capitol Hill anthrax cleanup; the reports resulting from each follow:

- *Regional Lessons Learned from the Capitol Hill Anthrax Response*, March 2002;
- *60-Day Counter-Terrorism Contracting Assessment Final Report*, May 2002;
- *Federal On-Scene Coordinator's After Action Report for the Capitol Hill Site*, August 2002; and
- *Challenges Faced During the Environmental Protection Agency's Response to Anthrax and Recommendations for Enhancing Response Capabilities: A Lessons Learned Report*, September 2002.<sup>14</sup>

One of these reviews, the 60-day counter-terrorism contracting assessment report, focused exclusively on the capability of EPA's existing emergency response contracting network to respond to terrorist incidents, while the other three addressed a range of issues, such as operations and management, communications and coordination, health and safety, and the resources available to EPA. The overarching purpose of the four reviews was to derive lessons learned from EPA's responses to the anthrax incidents in order to improve the agency's ability to handle the kind of threats associated with large terrorist incidents. In this regard, while EPA concluded the cleanup was a success because the anthrax on Capitol Hill was removed efficiently and safely in the face of numerous and unprecedented challenges, the reports include a wide range of recommendations aimed at improving EPA's response capabilities. Regarding contracting, the four reviews found that the agency's emergency response contracting network met the response and procurement needs at the Capitol Hill site, but they also identified suggestions or recommendations for EPA to improve contract support for potential future responses. The lessons learned and recommendations included in the counter-terrorism contracting assessment report generally address the contracting issues that were identified in the broader reviews as well.

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<sup>14</sup>This report focused largely on the Capitol Hill anthrax cleanup but also included EPA's roles in other anthrax incidents, such as at other federal facilities.

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The counter-terrorism contracting assessment report developed 13 recommendations, 9 of which it identified as the most urgent. These high-priority recommendations include the following:

- Facilitate counter-terrorism equipment acquisition and maintenance by compiling a national vendor database of sources of counter-terrorism equipment, supplies, and services.
- Create a strike team of headquarters and regional contracting officers and project officers that will be available for deployment 24/7 in the event of an emergency to assist with emergency procurement needs.
- Increase the administrative support provided to on-scene coordinators during a major terrorism-related response by, for example, providing staff to review daily cost reports, review invoices, and process on-site paperwork.

According to its April 21, 2003, status report of emergency response contracting activities, EPA has completed or is currently taking steps to address the contracting recommendations in the counter-terrorism contracting report. Regarding the three recommendations discussed above, EPA has done the following:

- EPA has developed counter-terrorism equipment warehouse contracts for most of its regions.
- EPA developed a final draft document on establishing a national contract support team and released it within EPA for review on April 18, 2003.
- The workgroup addressing the need for administrative support for on-scene coordinators is working on a list of specific administrative support tasks that are required.

The next section of this report discusses some other areas in which EPA's contracting oversight might be improved that we identified during our review of the Capitol Hill anthrax cleanup.

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## Certain Oversight Practices That Could Enhance EPA's Oversight Are Used in Some, but Not All, Regions

As a result of the convergence of EPA staff from nine of its regions at the Capitol Hill site, regional differences in contractor oversight were highlighted. Three oversight differences concern contract cost data and the review of these costs. First, regions vary in the way they use a computerized contract cost-tracking system called the Removal Cost Management System. All regions use the system for removal contracts; however, some regions also use it for some technical contracts also used at cleanup sites. Second, some regions require that invoice reviews be documented before payments are made; other regions have no such requirement. Third, regarding cost reviews, some regions hire administrative specialists to conduct detailed daily on-site reviews of contract costs in support of the on-scene coordinator, while others only rely on the on-scene coordinator to both manage cleanups and review and approve the contract costs.<sup>15</sup>

## Computerized Cost-Tracking System

In 1988, to better support Superfund program management, EPA developed a computerized cost-tracking system for cleanups so the agency could obtain consistent documentation from contractors at all sites in a timely and efficient manner. Specific anticipated benefits included timely tracking of total costs to ensure that cleanup projects would not exceed authorized amounts, more efficient invoice verification, and the ability to develop more accurate cost estimates for cleanups. The tracking system provides up-to-date cost information organized under the main categories of "personnel," "equipment," and "other field costs;" the system further breaks "other field costs" into such subcategories as materials and supplies, travel, lodging, per diem, and subcontracts. Thus, to the extent that regions require contractors to input daily contract costs into the system, EPA can readily monitor total costs as well as individual cost categories on a daily basis. Daily cost information supports oversight better than monthly information because it allows timely, on-site reviews of costs that can uncover inefficient or excessive use of labor and equipment.

While a 1989 memorandum requiring the use of the tracking system indicated that all site costs were to be input into the system, generally only the costs associated with removal contracts are entered daily into the system. For example, on the Capitol Hill anthrax cleanup, the

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<sup>15</sup>Generally on-scene coordinators review and approve costs for removal contracts and review costs for technical contracts; project officers generally approve costs for technical contracts.

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expenditures (\$10.2 million) for the four multi-year removal contracts were input into the system, but the expenditures (\$7 million) for the four multi-year technical contracts were not. According to EPA officials, part of the rationale for inputting removal contract costs into the system is that the type of contract used—“time and materials” contracts—requires more oversight than some other contract types, such as fixed-price contracts. That is, the removal contracts provide for specific labor rates but do not specify the number of hours that may be applied under the contracts. Most of the technical contracts currently used by the regions are cost reimbursement contracts and a few are fixed-priced contracts. Further, the fixed-priced contracts used by the regions will include a cost reimbursement portion that may cover activities such as contractor travel and subcontracts, according to a Region III contract official. For example, the cost reimbursement portion of one of the fixed-price technical contracts used for the Capitol Hill anthrax cleanup was substantial—about half of the contract cost of \$4.4 million was invoiced under the cost reimbursement portion, according to a Region III contract official.<sup>16</sup> As with work performed on a time-and-materials basis, cost-reimbursement work requires appropriate surveillance during performance to provide reasonable assurance that efficient methods and effective cost controls are used. In addition, the technical contracts support work at numerous cleanup sites, and EPA also needs to track site-specific costs as well as total contract costs. However, because EPA does not consistently use the contractor cost-tracking system to track the costs incurred under its technical contracts, complete and consistent cost data on specific cleanup sites are not readily available.

Although EPA generally does not use the tracking system for technical contract costs, individual on-scene coordinators in some regions have required that these costs, as well as others, such as those incurred by state and federal agencies, be entered into the system. According to two such on-scene coordinators with whom we spoke, a key benefit of using the tracking system is that it gives them timely information on costs which helps them oversee and manage the work. According to an environmental engineer with EPA’s Environmental Response Team, the benefits of using

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<sup>16</sup>This and the other Region III technical contract were negotiated as fixed-price contracts with cost reimbursement provisions. Under these contracts, contractors provide EPA with “dedicated teams” that provide technical assistance at set monthly rates for up to a predetermined amount of time; additional time may be provided at fixed hourly rates; and other specialized personnel and contractor travel and subcontracting are included among the items that are paid under the cost reimbursement provisions.

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the tracking system for all of the contracts would include having consistent cost data about each cleanup site in one place, thereby enabling the agency to quickly respond to the numerous site-specific questions frequently asked by EPA management, the Congress, the Office of Management and Budget, the Federal Emergency Management Agency, and others. For example, using the tracking system one can quickly break out the expenditures into individual cost categories. The four Capitol Hill contracts entered into the tracking system include, in the aggregate, personnel costs of \$2.8 million, lodging costs of \$1.6 million, and per diem costs of \$0.6 million. Using the tracking system, analyses of contract cost categories can be performed on individual contracts and individual sites. However, because technical contracts generally are not included in the tracking system, information on individual cost categories for the entire cleanup is incomplete.

## Documentation of Invoice Reviews

EPA's *Contracts Management Manual* describes responsibilities and procedures for processing contractors' invoices. Contract invoices are to be reviewed thoroughly for cost reasonableness and to be processed in a timely manner. While the guidance may be tailored to specific contracts and the use of checklists is optional, EPA's policy requires documentation to show that the appropriate reviews have been performed. The manual defines the roles of the various staff involved in reviewing and approving invoices. Among the key personnel in this process are the EPA staff who oversee the actual contract work<sup>17</sup>—primarily on-scene coordinators in the case of the Capitol Hill anthrax site—and the project officer. In general, the staff who oversee the work are responsible for reviewing individual contract costs for reasonableness and informing the project officers of any problems with the costs, such as excess hours charged. The project officers are responsible for reviewing contract invoices for payment and completing and submitting invoice approval forms to EPA's financial management center for payment. The contract invoices for the removal and technical contracts are typically highly detailed and presented in varying formats.

Invoice reviews for removal contracts are generally more standardized across EPA than the invoice reviews for the technical contracts. Regions use varying invoice review approaches for the technical contracts. For example, beginning in November 2002, EPA Region III established a new

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<sup>17</sup>EPA staff overseeing the work are referred to as "work assignment managers" in the EPA manual.

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process for reviewing invoices of technical contracts: the relevant EPA staff who oversaw or are overseeing the work at the sites receive monthly site-specific invoices from contractors, and the EPA staff are required to provide a written statement to the EPA project officer either indicating agreement with the costs or identifying questions about them. Region III revised its invoice review process after a new project officer with prior auditing experience was hired. This individual proposed the change to better ensure that invoices were reviewed by the on-site person familiar with the work that was performed—such as the on-scene coordinator—and that the review was documented before invoices were paid. Similarly, Regions V and IX send forms requiring responses to questions about the invoices, along with the monthly invoices, and require the work assignment managers overseeing the contract work to return the completed forms to the project officers.

However, before this change, and during the Capitol Hill anthrax cleanup, Region III did not require written certification of invoice reviews. Region III's earlier approach is similar to the one currently used in Region IV, where the project officer sends monthly invoices to the EPA work assignment managers for review and asks them to respond if they have concerns. Lacking a response from an EPA work assignment manager, the project officer approves the invoice for payment after a specified date. In these cases, the agency does not have documentation of the appropriate invoice reviews by the EPA staff who oversaw the contract work. Another variation is used in Region X: the project officer approves the monthly invoices without providing the EPA work assignment manager the opportunity to review them for reasonableness. As a result, the review is performed by an individual who did not oversee the work rather than by on-site staff who know the specifics of the work performed.

### Dedicated Administrative Specialists to Review Costs

EPA's on-scene coordinators generally are responsible for managing all aspects of emergency environmental cleanups: organizing, directing, and documenting cleanup actions.<sup>18</sup> Specific tasks include conducting field investigations, monitoring on-scene activities, and overseeing the cleanup actions. The on-scene coordinator is also the individual with primary responsibility for ensuring that cleanup costs are managed and tracked as the cleanup progresses. The cost reviews that are required to ensure that

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<sup>18</sup>As discussed, at the Capitol Hill anthrax cleanup, EPA's lead on-scene coordinator reported to the Capitol Police Board, and about 50 on-scene coordinators worked at the site during the cleanup.

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EPA approves only reasonable and allowable costs are detailed and time-consuming. An EPA cost management principle for the Superfund program is that costs can be managed and documented most effectively from the cleanup site as they occur. However, EPA's *Removal Cost Management Manual* recognizes that the demands on the on-scene coordinator's time and attention are great and that, therefore, some cost management responsibilities have to be delegated to other on-site or off-site personnel.

To address this workload issue, Region III established an administrative position to provide on-site cost management support to its on-scene coordinators. As discussed earlier, one of Region III's site administrative officers<sup>19</sup> worked on site at the Capitol Hill anthrax cleanup, supporting the lead on-scene coordinator essentially full-time from October 2001 through April 2002 and part-time for several more months. As a result, the daily costs for four removal contracts were examined, contractor hours were traced back to sign-in sheets, and equipment deliveries and uses confirmed. The lead on-scene coordinator could not have conducted these detailed cost reviews because of other demands, and the other on-scene coordinators on site (many of whom were assigned to the site for only several weeks) also were involved overseeing the work being performed and would not have been able to conduct timely, detailed cost reviews.

Also, as discussed above, one of the lessons EPA learned from its assessments of its responses to the recent terrorist attacks, including the anthrax incidents, is that the agency needs to provide more administrative support to its on-scene coordinators who are responding to threats associated with terrorist incidents. The *60-Day Counter-Terrorism Contracting Assessment Final Report* specifically said that on-scene coordinators need increased support to review daily cost reports and invoices and to process paperwork on-site. Although EPA's Region III provides cost management support to its on-scene coordinators on a routine basis, most of the regions do not have positions dedicated to assist on-scene coordinators with their cost management responsibilities and, therefore, do not have trained support staff readily available to augment large or complex emergency cleanup efforts. Region III, which was responsible for the contracting for the Capitol Hill anthrax cleanup, has three such positions and was able to provide a site administrative officer

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<sup>19</sup>Region III refers to this position as site administrative officer or field administrative specialist.



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to perform detailed cost reviews of removal contracts at the Capitol Hill site. Region II also has three similar positions. Five other regions we contacted do not have a similar position.<sup>20</sup>

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## EPA Negotiated Indemnification Agreements with Two Contractors to Address Their Liability Concerns

People in or near the contaminated Capitol Hill buildings could have been harmed by anthrax that was not successfully removed or by a release of the chemicals used to decontaminate the buildings. For example, the decontaminant used in the fumigation cleanup method—chlorine dioxide gas—may irritate the respiratory tract at low concentrations and is fatal at high concentrations. In many cases, contractors can obtain pollution liability insurance to cover harm to third parties that may arise from cleanup activities; in other cases, the cost of such insurance may be prohibitive. In the case of the Capitol Hill anthrax cleanup, two contractors with key roles in the fumigation of the Hart Senate Office Building informed EPA that they were not able to obtain such insurance at a reasonable cost, and they requested indemnification. As discussed below, EPA agreed to provide the indemnification authorized by CERCLA to the two contractors, protecting them from the financial liability that could result if a third party were injured by the contractors' release of a harmful substance, including anthrax.

For example, numerous uncertainties about the use of chlorine dioxide gas for this task existed, and IT Corporation—which was tasked to fumigate the Hart office building using chlorine dioxide gas—would not start removal procedures without receiving indemnification from EPA against liability for damages. According to EPA officials, chlorine dioxide had not been used previously for removing anthrax or for fumigating such a large area. After EPA determined that IT Corporation and three of its subcontractors supplying the fumigation chemicals and technologies had diligently sought insurance and none was available at a reasonable price, in November 2001, the agency agreed to provide them with indemnification. Specifically, EPA agreed to compensate IT Corporation and its three subcontractors up to \$90 million if they were deemed liable for damages caused by a negligent release of a hazardous substance, pollutant, or contaminant, including but not limited to anthrax and chlorine dioxide. According to EPA officials, the negotiations for the indemnification agreement were completed in about 4 weeks. The indemnification does not cover liability for intentional misconduct or

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<sup>20</sup>We contacted regions II, III, IV, V, VIII, IX, and X.

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gross negligence. It appears that the cleanup was handled without harmful incidents occurring. According to EPA officials, neither IT Corporation nor the subcontractors have sought compensation under the indemnification agreement.

In December 2001, after the agreement with IT Corporation was in place, another contractor supporting the fumigation requested and obtained indemnification. CDM Federal Programs Corporation (CDM), whose responsibilities included placing the materials to test for the presence of anthrax during fumigation, received indemnification terms similar to those granted IT Corporation but with significantly lower compensation amounts. Specifically, EPA agreed to compensate CDM up to \$1 million if it were deemed liable for damages caused by a negligent release of a hazardous substance, pollutant, or contaminant, including but not limited to anthrax. This indemnification also does not extend to liability arising from intentional misconduct or gross negligence. Negotiations for this agreement built on the previously negotiated agreement with IT Corporation, and, according to EPA officials, were accomplished in about a week. CDM was already working at the site when it requested indemnification and continued to work while the negotiations were in process.

Although IT Corporation required that an indemnification agreement be in place before it would begin the decontamination of the Hart building, the cleanup itself was not delayed because other issues needed to be resolved before IT Corporation started the fumigation process. For example, tests had to be conducted and then reviewed by EPA, the Capitol Police Board, and others to confirm that chlorine dioxide had the antimicrobial properties to effectively destroy anthrax. By the time open issues were resolved and the decontamination could begin, EPA had reached its agreement with IT Corporation and its subcontractors. However, in other emergency cleanups, such negotiations could delay the start of decontamination work. In this regard, EPA has concluded that in the future, a more expedient way to indemnify contractors for emergency situations such as anthrax incidents needs to be in place to prevent delays. In fact, two of the EPA reviews of its responses to the anthrax incidents recommended that EPA take steps to expand contractor liability indemnification to address counter-terrorism response activities. Once Subtitle G of the recently enacted Homeland Security Act of 2002 is fully implemented, agency officials believe that their emergency response contractors will face little or no legal liability to injured third parties if the contractors use qualified antiterrorism technologies previously approved by the Secretary of Homeland Security. According to an EPA official, if

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this act had been in effect at the time of the anthrax cleanup, and the Department of Homeland Security had approved the chlorine dioxide technology, the contractor would not have needed any indemnification protection.

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## Conclusions

In about 3 months and without harm to emergency response workers or congressional staff, EPA, the Capitol Police Board, and others planned and successfully conducted the first cleanup of office buildings contaminated by a lethal form of anthrax that had caused several deaths elsewhere. Moreover, EPA has taken the initiative to study its response actions to better prepare itself for other emergency cleanups, including other potential terrorism attacks, and has identified areas in which it could improve. Despite the success of the cleanup, our review identified certain inconsistencies in EPA's contractor cost oversight that may affect its quality. First, regarding tracking contract costs, because few regions use the cost-tracking system for technical as well as removal contracts, EPA does not have readily accessible, consistent contracting data on its cleanup sites. One result of this lack is that the agency was unable to readily respond to your questions about the costs of this cleanup, including the categories of expenditures—how much was spent on personnel, travel, equipment, and so on. In addition, EPA has less assurance that it is providing effective, consistent oversight of its contracts. Second, because EPA has not ensured that all of its regions document the reviews of contractor invoices conducted by cognizant on-site officials, the agency's ability to ensure that contractors' charges are accurate and reasonable is lessened. Finally, on-scene coordinators face many competing demands; therefore, their reviews of costs may be less timely than those that can be provided by a specialist working on site to support the on-scene coordinators' cost reviews. Such administrative support could provide EPA with better assurance that its payments to contractors are appropriately reviewed and adjusted on a routine basis. It could also be readily called upon to conduct these cost reviews during large and complex emergency cleanups, such as those that may stem from terrorism.

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## Recommendations for Executive Action

To enhance its ability to ensure that the agency is providing effective and efficient contractor oversight, we recommend that the Administrator of EPA direct the Office of Solid Waste and Emergency Response to require

- the regions to track and monitor both technical and removal contract cost data in the agency's computerized cost-tracking system and

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- the on-site staff who are responsible for reviewing contractor cleanup costs to certify that they have done so before the costs are approved for payment.

In addition, we recommend that the Administrator direct the Office of Solid Waste and Emergency Response to examine whether more or all of the regions should hire specialists—either EPA or contractor staff—to support the on-scene coordinators by providing timely, detailed reviews of contract costs. If EPA uses contractor staff for this purpose, the agency will need to provide appropriate contract oversight and ensure that potential conflicts of interest are identified and mitigated.

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## Agency Comments and Our Response

We provided copies of our draft report to EPA for review and comment. In commenting on the draft, the Director of the Contract Management Center in the Office of Emergency and Remedial Response, Office of Solid Waste and Emergency Response, agreed to (1) consider adding the technical contracts to the computerized cost-tracking system as the agency awards the next round of these multiyear contracts and (2) ensure all regions coordinate with on-site staff for invoice reviews prior to approval. The Director also said that EPA is currently examining providing additional administrative support at cleanup sites and is considering using contractor support when in-house positions are not available.

One of the considerations the Director of the Contract Management Center cited regarding the inclusion of the technical contracts in the cost-tracking system is that reengineering the system to fit the different types of technical contracts that EPA uses might involve a considerable expense for the agency. Further, while she acknowledged that the cost tracking system may be particularly applicable when the technical contractors are involved in removal (cleanup) activities, she said the additional cost of using the system may not be justified in some cases, such as for finite work performed under a negotiated work plan or a fixed level of effort. However, we believe reengineering costs may not be a barrier to using the system for both technical and removal contracts. Specifically, the system is already being used to track the costs of some of EPA's technical contracts. Further, an EPA environmental engineer with extensive experience working with the tracking system told us that changes to the system would not be required to add technical contracts. In addition, effective oversight of both time-and-materials work and cost-reimbursement work is essential to ensure costs are reasonable and accurate. However, currently the tracking system is used to support the on-site review of the time-and-materials work done under the removal

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contracts but not for the contract-reimbursement work done under the technical contracts. We believe that the existing tracking system offers EPA an economical vehicle for enhancing both its contracting data and its contractor oversight by including the technical contracts in the cost tracking system as was envisioned when the system was developed.

Regarding our recommendation that the on-site staff responsible for reviewing contractor invoices certify that they have done so before the costs are approved for payment, the Director agreed to require all EPA regions to coordinate their invoice reviews with the on-site staff before approving invoices for payment. If EPA requires the reviewers in all the regions to certify their invoice reviews—as we recommend and as some EPA regions currently do—the agency will be fully responsive to our recommendation. Such a requirement will provide greater assurance that the invoices EPA approves are accurate and reasonable.

EPA told us that it is currently examining the issue of additional administrative support at cleanup sites by either EPA staff or contractors, and we have revised our recommendation to take into account concerns that would arise if EPA delegated its contract cost review function to contractors.

EPA agreed that the information the report provides on the indemnification agreements that the agency negotiated with two contractors is accurate but suggested that the report also discuss the limitations of the indemnification that EPA can provide under CERCLA. As our report accurately addresses the extent to which EPA agreed to indemnify contractors against liability for potential damages related to the cleanup, we believe that a broader discussion of indemnification issues is not necessary.

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## Scope and Methodology

To determine the costs to EPA of removing anthrax from the Capitol Hill site, we obtained and reviewed cost information from the agency's Office of the Chief Financial Officer. We discussed cleanup estimates and contract costs for the Capitol Hill anthrax site with EPA financial and contract staff. We also obtained detailed cost information on four of EPA's removal contracts that was available from EPA's Removal Cost Management System, the database that tracks costs by site and cost categories. We were not able to obtain this level of detailed cost information for all contractors because EPA does not use this database for all the contractors who work at cleanup sites. To determine how EPA's costs for the cleanup were funded, we reviewed relevant EPA financial documentation and appropriations legislation that reimbursed the

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agency's Superfund program for expenditures associated with the resources used on the cleanup. We did not validate or verify these data.

To determine the extent to which the contracts used at the Capitol Hill anthrax site were competitively awarded, we reviewed EPA regional contract documents and discussed the competitive contract process EPA used with agency contract officials. We obtained and reviewed EPA noncompetitively awarded contract documents and the regulations that the agency is required to follow to justify awarding such contracts. We reviewed contracts and agency reports to identify the roles and tasks of the contractors that participated in the Capitol Hill anthrax cleanup and discussed specific contract roles and tasks with EPA officials who were responsible for the cleanup.

To describe the extent to which EPA oversaw contractors' work on the Capitol Hill anthrax cleanup to ensure it was done appropriately and the charges were reasonable, we interviewed Region III contract officials and the site administrative officer who oversaw four contracts during the cleanup. We also examined documentation of the oversight provided by reviewing Capitol Hill site contracting files. We reviewed documentation of, and talked with agency officials about, the current contract oversight practices EPA uses, including staff responsibilities for cost oversight and the use of the contractor cost tracking system. In addition, in part because of delays in obtaining contract information, we surveyed the 63 EPA personnel whom the agency identified as having provided contractor oversight to obtain information on their roles in overseeing the contractors' cleanup work for the Capitol Hill anthrax site. Using a Web-based survey, we received responses from 56 individuals, a response rate of 89 percent. We also interviewed nine EPA personnel who the survey identified as having spent considerable time at the cleanup site performing contract oversight. In addition, we reviewed four EPA assessments that either focused on or included the Capitol Hill anthrax cleanup and that identified contract oversight issues and recommendations. We obtained information on actions EPA has taken or is taking to respond to the recommendations addressing contracting issues.

To describe EPA's indemnification of contractors against liability for potential damages, we reviewed CERCLA provisions and EPA guidance governing indemnity authority, as well as contract modifications regarding indemnification that EPA made to two contracts used for the Capitol Hill anthrax cleanup. We also discussed with EPA officials how the indemnification process affected the Capitol Hill anthrax cleanup.

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We conducted our review from June 2002 through May 2003 in accordance with generally accepted government auditing standards.

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As agreed with your office, unless you publicly announce the contents of this report earlier, we plan no further distribution until 14 days after the report date. At that time, we will send copies of this report to the Administrator of EPA and other interested parties. We will make copies available to others upon request. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff have any questions, please call me at (202) 512-3841. Key contributors to this report are listed in appendix II.

Sincerely yours,

A handwritten signature in black ink, reading "John B. Stephenson". The signature is written in a cursive style with a long horizontal flourish extending to the right.

John B. Stephenson  
Director, Natural Resources  
and Environment

# Appendix I: Contract Tasks and Roles

Contract	Purpose	Task/role performed
<b>Competitively awarded contracts</b>		
IT Corporation	Removal	<p>Prepare buildings for decontamination. Conduct and support decontamination operations, including fumigation with chlorine dioxide gas. Decontaminate interior surfaces of buildings, other structures, cars, and other vessels. Provide for collection, containment, and transportation and disposal of contaminated materials from the site operations.</p> <p>Provide support to EPA sampling teams and other federal responders, including response technicians, to assist with decontamination activities.</p>
Tetra Tech EM, Inc.	Technical	<p>Provide the on-scene coordinator and incident commander fumigation design procedures, including details on fumigant delivery; concentration; operating conditions, such as temperature and humidity; fumigant containment and recovery; and monitoring of parameters. Provide detailed design for delivery of fumigant, equipment requirements and specifications, flow schematics, and detailed schedules and operating procedures to use during fumigation. Provide a chlorine dioxide specialist to assist EPA in overseeing the fumigation setup.</p> <p>Provide technical support to the on-scene coordinator in developing chronology of events at the site, including researching various files, documents, and logbooks in order to develop a comprehensive report.</p> <p>Monitor and assist with the oversight of the chlorine dioxide fumigation process. Assist with health and safety matters at the site, conduct sampling, assist and oversee off-gassing, inventory, and return items being treated.</p> <p>Support the on-scene coordinator in conducting presentations and briefings related to post-treatment and design of chlorine dioxide use in the heating, ventilation, and air-conditioning system.</p> <p>Sample a small number of critical items (plastic, leather, and polyester) for ethylene oxide and its derivations to determine how the ethylene oxide and its derivatives are maintained in the materials and off-gas over time.</p>
Earth Tech, Inc.	Removal	<p>Provide decontamination services and other direct support to sampling teams. Decontaminate interior surfaces of buildings, other structures, and interior and exterior surfaces of cars and other vessels identified by the on-scene coordinator. Collect all expended cleaning agents and materials for treatment and/or disposal.</p> <p>Provide decontamination facilities and services for response personnel and their equipment. Inventory items—segregating clean and contaminated materials and salvageable and expendable items—and provide documentation of inventoried items.</p> <p>Propose a decontamination strategy for critical items (including personal items such as photographs, framed diplomas, and equipment). Decontaminate critical and salvageable items from the Capitol Complex, including setting up work zones for items to be decontaminated and for personnel decontamination.</p>



**Appendix I: Contract Tasks and Roles**

<b>Contract</b>	<b>Purpose</b>	<b>Task/role performed</b>
		<p>Return property after decontamination.</p> <p>Provide contamination reduction and isolation facilities and operations that improve and ensure safe access to contaminated areas and items and prevent further spread of contamination.</p>
Environmental Quality Management, Inc.	Removal	Provide personnel and equipment, including portable decontamination facility. Collect expended cleaning agents and materials for treatment and/or disposal. Dispose of materials or items that could not be decontaminated.
CDM Federal Programs Corporation	Support	<p>Oversee preparation, handling, placement, and collection of spore strips used during fumigation with chlorine dioxide gas and ethylene oxide gas. Develop a procedure for spore strip emplacement; removal; and critical item tagging, tracking, and shipping.</p> <p>Provide sampling such as swipe and high efficiency particulate air (HEPA) vacuum (including efforts to collect, prepare, and ship samples), item decontamination, and minor remediation work.</p> <p>Support critical item degassing activities in Beltsville, Maryland. Maintain critical item inventories and coordinate the release and return of critical items to congressional staffers.</p> <p>Support chlorine dioxide decontamination of congressional mail packages.</p>
Roy F. Weston, Inc.	Technical	<p>Develop various documents/plans to be used during the response activities (e.g., standard operating procedures for sampling, decontamination, source reduction). Provide reconnaissance, photo documentation, and sampling of congressional office buildings.</p> <p>Provide technical support for the selection and implementation of decontamination procedures; building-specific plan development for anthrax remediation, including sampling plans, isolation plans, decontamination plans, and item recovery plans; and sampling support for anthrax analysis using HEPA and wipe sampling techniques; perform oversight of removal crews. Provide swab and HEPA sampling and decontamination support.</p> <p>Provide bag-and-tag operations of critical and salvageable items in congressional office buildings. Provide air monitoring operations during chlorine dioxide fumigation operations.</p>
Ecology & Environment, Inc.	Technical	<p>Develop sampling and decontamination plans, sample labels and chain-of-custodies, and maps to support sampling activities and to track sampling results.</p> <p>Perform sampling, monitoring, and decontamination of areas in the Capitol Hill complex. Conduct sampling tracking and handling activities, including preparing samples for shipping.</p> <p>Compile and review background data and organize site documentation files.</p>

**Appendix I: Contract Tasks and Roles**

<b>Contract</b>	<b>Purpose</b>	<b>Task/role performed</b>
		Provide technical support to the operations section and support to the EPA Mobile Lab.
Lockheed Martin	Support	<p>Assist in monitoring temperature and relative humidity inside office buildings and in monitoring chlorine dioxide, chlorine, wind speed and direction, temperature and relative humidity in surrounding area.</p> <p>Assist with development and evaluation of anthrax fumigation procedures using spore strips in a test facility and train other contractors in the handling and placement of spore strips in the office building.</p> <p>Provide ambient air monitoring for chlorine dioxide using tape meters and a portable meteorological tower to document that no chlorine dioxide is being emitted from the treatment area. Provide on-site assistance to ensure that spore strip sampling is being conducted properly and that data management is being performed accurately and completely.</p>
Guardian Environmental Services, Inc.	Removal	Assist in the removal of items from the contaminated office suites in the congressional office buildings, including removal of contaminated office furniture, office equipment, and carpet. Construct isolation chambers, decontamination chambers, and other related structures.
URS Operating Services, Inc.	Technical	Provide sampling for anthrax in the Capitol Hill complex.
MVM Security & Staffing Services	Security	Provide security personnel to staff the single entrance/exit and to patrol perimeter of the storage location used for property removed from U.S. Senate offices during the cleanup to ensure that no unauthorized personnel enter the work area and assure that property items are not removed from the work area without approval of EPA.
TSI, Inc.	Supplies	Provide Porta Count plus respirator fit tester.
<b>Noncompetitively awarded contracts</b>		
Kemron Environmental Services, Inc.	Technical	<p>Perform air sampling and perform HEPA vacuuming services.</p> <p>Remove critical items and documents, spray affected areas with chlorine dioxide, and perform cleaning and breakdown of work zones.</p> <p>Assist EPA in the evaluation of possible remediation of the heating, ventilation, and air-conditioning system, including evaluation of affected areas, and construction of critical barriers inside the ductwork to isolate affected areas from uncontaminated areas. After fumigation of the affected heating, ventilation, and air conditioning system, provide confirmatory sampling support, interior duct sampling, additional cleaning of the system (including post-fumigation scrub down inside the ducts), and removal of duct insulation.</p>
HMHTTC Response Team, Inc.	Removal	<p>Perform cleanup activities, including construction and removal of isolation barriers, HEPA vacuuming operations, and application of liquid chlorine dioxide.</p> <p>Provide 24-hour support for decontamination and rescue operations at the Capitol Hill anthrax site.</p>

**Appendix I: Contract Tasks and Roles**

<b>Contract</b>	<b>Purpose</b>	<b>Task/role performed</b>
Southwest Research Institute	Laboratory work	Provide analysis of spore strips placed in various locations during cleanup operations. Receive and perform daily observations of thousands of spore strips.
University of California—Berkeley Sponsored Projects Office	Technical	<p>Participate in and support program plan development relating to spore sterilization technologies for remediation of federal facilities.</p> <p>Develop experimental and field test plans and methodologies for characterization/modeling spore killing processes and kinetics and factors that affect the efficacy of spore killing in field-scale applications.</p> <p>Establish laboratory systems for the measurement of gas phase sporicidal effects at federal office and mail facilities. Provide laboratory analytical support for measurement of gas phase sporicidal effects. Develop experimental and test plans and methodologies for assessing and validating spore killing processes.</p> <p>Determine the concentrations of chlorine dioxide needed to decontaminate anthrax on Capitol Hill. Prepare 31,500 test strips containing a bacillus similar to anthrax and send to Capitol Hill. The exposed strips will be sent to labs and results then will be sent to the University of California, Berkeley, to be included in a consolidated final report.</p>
Silva Consulting Services, LLC	Technical	Maintain sample management system software in a private, secure environment on the Internet. Provide EPA personnel and designated contractor personnel secure, controlled access to the database. This system could generate a large variety of reports to address particular questions about sampling results.
Science Applications International Corporation	Technical	Provide consulting services to EPA on-scene coordinator in environmental remediation of anthrax-contaminated buildings in the Capitol Hill complex. Support includes data interpretation of the spore strips used to test the efficacy of the kill of anthrax, data validation, review of documents, assistance in document preparation, and report writing. Coordinate efforts with the University of California, Berkeley.
Biomarine, Inc.	Supplies	Provide equipment that includes biopaks, facemasks, oxygen cylinders, gel tubes, foam scrubbers, coolant canister foam, flow restrictors, and biopak service and retrofit kits.
Envirofoam Technologies, Inc.	Supplies	Provide Sandia foam and backpack dispensing units.
Safeware, Inc.	Supplies	Provide respirators with battery and cartridge.
Airgas Safety	Supplies	Provide air purifying respirators.
Sabre Oxidation Technologies, Inc.	Technical	Provide engineering support during the assessment of the feasibility and design of the systems for fumigating air handling return system.
U.S. Art Company, Inc.	Technical	Provide training on proper procedures for handling, packaging, and decontaminating artifacts (paintings, sculptures, and other art forms) from the Hart Senate Office Building.

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**Appendix I: Contract Tasks and Roles**

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<b>Contract</b>	<b>Purpose</b>	<b>Task/role performed</b>
Mine Safety Appliances	Supplies	Provide self-contained breathing apparatus system.
Coastal Safety & Health Services, Inc.	Supplies	Provide indoor air quality meter.
New Horizons Diagnostics Corporation	Supplies	Provide anthrax detection kits.

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Source: EPA.

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# Appendix II: GAO Contacts and Staff Acknowledgments

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## GAO Contacts

John B. Stephenson (202) 512-3841  
Christine Fishkin (202) 512-6895

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## Acknowledgments

In addition to those named above, Heather Balent, Greg Carroll, Nancy Crothers, Richard Johnson, and Susan Lawes made key contributions to this report.



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