United States General Accounting Office

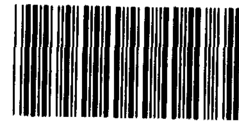
GAO

Report to the Chairman, Subcommittee on Investigations and Oversight, Committee on Science, Space, and Technology, House of Representatives

April 1992

ENERGY MANAGEMENT

Vulnerability of DOE's Contracting to Waste, Fraud, Abuse, and Mismanagement



RESTRICTED--Not to be released outside the General Accounting Office unless specifically approved by the Office of Congressional Relations.

RELEASED

GAO/RCED-92-101

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

Resources, Community, and
Economic Development Division

B-247012

April 10, 1992

The Honorable Howard Wolpe
Chairman, Subcommittee on
Investigations and Oversight
Committee on Science, Space,
and Technology
House of Representatives

Dear Mr. Chairman:

In January 1990 GAO began implementing a special audit effort to help ensure that areas vulnerable to waste, fraud, abuse, and mismanagement are identified and that appropriate corrective actions are taken. This effort focuses on 16 areas governmentwide, one of which is the Department of Energy's (DOE) contracting practices. Within this context, on May 13, 1991, you requested that we provide information on why we believe DOE's contracting practices are vulnerable. As agreed with your office, this report describes (1) problems resulting from DOE's approach to contracting and (2) DOE's recent efforts to address these problems.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of Energy; the Director, Office of Management and Budget; and other interested parties. We will also make copies available upon request.

If you have any questions about this report, please call me at (202) 275-1441. Major contributors to this report are listed in appendix II.

Sincerely yours,

Victor S. Rezendes
Director, Energy Issues

Executive Summary

Purpose

The Department of Energy (DOE) spends about 90 percent of its budget—$17.6 billion in fiscal year 1990—on contractors, primarily those who manage nuclear weapons facilities. In 1990, because of concerns about the way DOE manages these contractors, GAO designated DOE's contracting as a high-risk area vulnerable to waste, fraud, abuse, and mismanagement.

In May 1991, the Chairman of the Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, asked GAO to provide information on why GAO believes DOE's contracting practices are vulnerable, focusing particularly on (1) problems resulting from DOE's approach to contracting and (2) DOE's recent efforts to address these problems.

Background

Historically, DOE's contract management approach has been one of least interference in contractor operations and of reimbursing (indemnifying) contractors for virtually all costs. DOE used this approach with contractors who manage and operate government-owned facilities (M&O contractors) because it presumed that the contractors had the technical expertise and the business acumen to operate DOE's facilities. This management approach evolved from the contractual arrangements in the Manhattan Project during World War II, when the development of the first atomic bomb required unprecedented secrecy and the utmost urgency and involved extreme risk and uncertainty—circumstances that demanded a unique contracting approach. Historically, DOE and its predecessor agencies have also used this contract management approach for peacetime contracting activities. More recently, however, DOE has taken a more proactive approach to overseeing and monitoring its contracting activities.

Results in Brief

Over the years, GAO and the DOE Office of Inspector General (IG) have issued numerous reports identifying weaknesses in DOE's oversight and management of contractors.[1] This body of work has led GAO to conclude that DOE's contracting is vulnerable to waste, fraud, abuse, and mismanagement. DOE's vulnerability stems largely from DOE's long-standing management approach of (1) indemnifying nearly all contractor costs and (2) not exercising adequate oversight over contractor operations and activities.

[1]See Related GAO Products and app. I.

This management approach has led DOE to agree to contract clauses that diminish its authority to control contractor costs and activities. Clauses in some M&O contracts could even require DOE to reimburse the contractors for costs that DOE considers unreasonable. Furthermore, DOE's oversight of M&O contractors has not been sufficient to identify, among other things, (1) significant, widespread errors in the nuclear material inventories prepared by contractors and (2) the serious problem of about 10,000 missing classified documents at one facility. DOE's oversight also has not always ensured that widespread subcontracting weaknesses, such as contractors' not adequately seeking competition and circumventing DOE's subcontracting requirements, are corrected.

DOE has acknowledged contract management weaknesses and has begun making changes in the way it manages its contractors. It has taken actions to increase contractor accountability and to improve its oversight of contractor activities. However, it is too early to tell how effective these actions will be in addressing the long-standing and pervasive contracting weaknesses. As a result, GAO continues to believe that DOE's management of contractors is a high-risk area warranting oversight over the next several years.

Principal Findings

Ineffective Contract Clauses Inhibit DOE's Control

DOE's contract management approach has resulted in DOE's agreeing to contract clauses with some large M&O contractors that differ from the clauses called for in the agency's regulations. These clauses can limit DOE's ability to adequately protect the government's interests and to ensure the efficient use of contract funds. For example, in 1989 the DOE IG found that nonstandard clauses in some contracts could require DOE to reimburse the contractors for all costs, even those it considers unreasonable.

GAO reviews at the Lawrence Livermore National Laboratory illustrate how nonstandard contract clauses affect DOE's ability to control contractor costs and activities. For example, one nonstandard clause requires DOE and the University of California, which operates the Laboratory, to mutually agree on the Laboratory's property management system, instead of requiring that the Laboratory have the more rigorous system set forth in DOE's property management regulations. GAO found that the Laboratory (1) did not have adequate controls to ensure that the government's property

was safeguarded against theft, unauthorized use, or loss, and, as a result, (2) could not account for over $45 million of government property in the Laboratory's possession. Furthermore, because the contract between DOE and the University protects the University against the risk of lost, damaged, and destroyed property, the University's accountability for the missing items was minimal.

Another nonstandard contract clause did not clearly require DOE's approval of vehicle leases. Since 1986 the Laboratory has obtained more than 90 passenger vehicles under leases that were not approved by DOE. These vehicles were leased at rates that were substantially higher—about $600,000 more—than rates available through the General Services Administration.

Contractor Oversight Has Been Inadequate

DOE's approach to managing contractors has not resulted in adequate oversight of federal activities. For example, GAO found that at one facility the contractor could not account for about 10,000 secret documents. Although DOE had reviewed controls over the contractor's handling of classified documents, the reviews were not adequate to uncover this serious problem. In another case, the DOE IG found that reports on the nuclear materials inventory from DOE's weapons laboratories contained an error rate of 52 to 88 percent. Nuclear materials were routinely reported as being in use or needed when they were, in fact, excess. Although the accuracy of this information is critical to determining nuclear materials requirements, DOE was not aware of the reporting problem.

DOE's oversight of M&O contractors also has not been sufficient to safeguard against excessive subcontracting costs. DOE's M&O contractors spend about $5 billion annually on subcontracts. DOE reviews of the contractors' purchasing systems have identified significant, widespread weaknesses, resulting in excessive costs. These weaknesses include contractors' not adequately seeking competition and circumventing DOE's requirements. However, DOE's oversight has not been sufficient to ensure that appropriate corrective actions have been taken. As a result, lax subcontracting practices could go uncorrected, continuing to place government funds at risk. For example, although DOE required its field offices to submit plans describing oversight that would be performed to correct identified deficiencies, almost half of DOE's field offices had not submitted such plans during the last 3-year review cycle. In addition, even when serious deficiencies were found, DOE did not always take appropriate action. For example, according to a DOE report, during 1990 DOE should

have either withheld or withdrawn approval of several contractors' purchasing systems until the contractors had corrected all major deficiencies. However, such action was not taken.

Change Will Take Time and Commitment

DOE is taking steps to improve its management of contractors. First, the Secretary of Energy has identified contract management as a serious internal control deficiency in his last three reports for the Federal Managers' Financial Integrity Act. He has also taken steps to make contractors more accountable for their actions, improve contractor oversight, and revise subcontracting and indemnification requirements. Furthermore, DOE has acted on many of the recommendations contained in GAO and DOE IG reports.

Because many of the Secretary's changes are in the early stage of implementation, their actual success in correcting contracting weaknesses will not be known for several years. Furthermore, changing DOE's management approach will be difficult and time-consuming because it will require a new management culture at DOE. Until a new culture is actually established, GAO believes that DOE's contract management will remain a high-risk area. Accordingly, GAO plans to monitor changes at DOE and to evaluate other aspects of DOE's contract management during the next few years.

Recommendations

This report focuses on examples from past reports to explain why GAO believes DOE is vulnerable to waste, fraud, abuse, and mismanagement. Many of these reports contained recommendations to correct identified problems. While GAO is not making additional recommendations at this time, GAO will continue to (1) monitor the progress DOE has made in strengthening its management of contractors and (2) recommend actions, as necessary, to further improve DOE's contract management practices.

Agency Comments

The information in this report was discussed with DOE and DOE IG officials, who agreed with the facts presented. DOE officials asked that GAO highlight DOE's corrective actions, which has been done. As requested, GAO did not obtain written agency comments on this report.

Contents

Executive Summary		2
Chapter 1 Introduction		8
	Evolution of DOE's Contract Management Approach	8
	Contracting Approach Continued Despite Concerns	10
	Most of DOE's Funds Are Used for Contracts	10
	DOE's Contracting Organization and Regulations	11
	GAO Designated DOE's Contract Management as an Area of High Risk	13
	Objectives, Scope, and Methodology	13
Chapter 2 DOE's Contracting Approach Has Resulted in Vulnerabilities to Waste, Fraud, Abuse, and Mismanagement		15
	Ineffective Contracts Weaken DOE's Control	15
	DOE's Oversight Is Inadequate to Control Contractors	19
	DOE's Subcontracting Oversight Is Inadequate	23
	Conclusions	26
Chapter 3 DOE's Changes Will Take Time and Commitment		27
	DOE Recognizes Need to Improve Contracting	27
	DOE Is Making Changes in Contract Management	28
	Changes Will Take Time and Effort	31
	GAO's Oversight Plans	32
	Conclusions	32
Appendixes	Appendix I: DOE Office of Inspector General Reports	34
	Appendix II: Major Contributors to This Report	35
	Related GAO Products	36
Figure	Figure 1.1: Locations of DOE's Field Offices	12

Abbreviations

AEC	Atomic Energy Commission
CPSR	Contractor Purchasing System Review Program
DEAR	Department of Energy Acquisition Regulation
DOD	Department of Defense
DOE	Department of Energy
DOE IG	Department of Energy's Office of Inspector General
FAR	Federal Acquisition Regulation
FMFIA	Federal Managers' Financial Integrity Act of 1982
GAO	General Accounting Office
GSA	General Services Administration
M&O	management and operating
OSHA	Department of Labor's Occupational Safety and Health Administration
RCRA	Resource Conservation and Recovery Act

Introduction

The contract management approach that the Department of Energy (DOE) follows was conceived by a predecessor agency that developed atomic weapons in the Manhattan Project during World War II. Shortly thereafter, this approach—characterized by limited interference in contractor work and indemnification (reimbursement) of almost all contractor costs—was criticized in congressional hearings. Nonetheless, this approach has continued and has contributed to one of the major problems facing DOE today—the cleanup and modernization of its nuclear facilities, which is estimated to cost from $150 billion to $200 billion. And, DOE remains highly dependent on contractors to carry out its mission.

Evolution of DOE's Contract Management Approach

Since World War II, DOE and its predecessor organizations have relied on corporations and universities (contractors) to carry out the majority of their statutory responsibilities at government-owned facilities—energy research, weapons testing and production, and nuclear material fabrication. The contract management approach evolved from World War II contractual arrangements between the Manhattan Engineer District of the War Department and industry and academic organizations that researched, designed, built, and operated the facilities used to produce the world's first atomic bombs under the Manhattan Project.[1]

The project was a unique undertaking, requiring the relaxation of typical procurement methods, such as the requirement for competitive bidding, to produce atomic capability under emergency conditions and under circumstances of utmost urgency, extreme risk, and unprecedented security. The Manhattan Engineer District responded to these circumstances by fashioning special contractual arrangements with participating industry and academic organizations. In exchange for private sector involvement, the government agreed, with few exceptions, to (1) fully reimburse all contractor costs and (2) completely indemnify contractors against any liability incurred from their involvement on the project. The required secrecy also limited external oversight of the contractors' activities.

After the war, the Atomic Energy Act of 1946 formally authorized the use of such management contracts to continue operating the government-owned plants in order to take full advantage of the skill and experience of American industry and academic organizations. These management and operating (M&O) contracts, as they are now known, are

[1]The DOE IG's report entitled General Management Inspection of the San Francisco Operations Office—(DOE/IG-0290, Sept. 20, 1990)—also discusses the evolution of DOE's contracting approach.

agreements under which the government contracts for the operation, maintenance, or support of government-owned research, development, production, or testing facilities, both nuclear and non-nuclear. The M&O contracting concept differs in a number of ways from standard federal contracting practices. The principal distinction is that it contemplates a long-term relationship for the operation of government-owned facilities in a spirit of partnership rather than the typical arm's-length relationship between buyers and sellers of products and services.

The act also established the Atomic Energy Commission (AEC), a civilian agency, to continue the atomic energy effort. Although the war emergency had ended, AEC maintained and liberalized the contractual arrangements created by the Manhattan Engineer District. This occurred, in part, because one of AEC's principal goals was the development of a viable atomic industry, and it was believed that atomic energy research would stagnate if it were deprived of the imagination and resources of independent research and private industry. Following the war, however, one corporation that had participated in the project withdrew and others hesitated to renew their contracts, raising concern about the industry's future.

To induce the continued participation of industry and academic organizations, AEC decided that special incentives were needed to attract and keep its M&O contractors. Therefore, it provided wide latitude and virtual independence from AEC involvement in the management of government-owned facilities; this approach has been referred to as the philosophy of least interference. Another incentive was the continued use of special contract provisions, such as hold-harmless clauses in which the government assumed virtually all financial risk resulting from the contractors' work for the government. Finally, AEC promised the contractors a long-term partnership with the government, premised on the belief that (1) the government and its M&O contractors shared the same interest in the work being performed and (2) contractors would develop an awareness of their public responsibilities, including the cost-effective expenditure of government funds.

AEC justifications for its contracting practices included (1) national security, urgent military requirements, and the need for secrecy, (2) technical difficulties in plant operations, engineering, and construction, and the unique know-how required to overcome these problems, and (3) the sacrifices entailed in taking on atomic energy work and the

contractors' reluctance to do so unless special privileges and exemptions were granted.

Contracting Approach Continued Despite Concerns

AEC's successors—ultimately DOE—continued to follow AEC's basic contract management approach. Yet, almost from the beginning, concerns have been raised about AEC's management approach. For example, in hearings held in 1949, Members of Congress expressed concern that AEC's policy of paying most contractor costs unduly favored contractors and resulted in additional costs to the government. Further, congressional critics expressed concern that the wide latitude and virtual independence given to AEC's contractors prevented AEC from effectively overseeing its programs.

Now, over 40 years later, DOE is facing enormous problems that partly result from the way it manages its contractors. DOE's nuclear weapons production facilities are essentially shut down. In addition, many of its facilities are facing a wide variety of serious environmental, safety, and operational problems. The estimated cost to address these problems is staggering—ranging from $150 billion to $200 billion. As we reported in March 1990,[2] shortcomings in DOE's oversight function, overreliance on contractors, and indemnification of most costs are some of the contributors to today's conditions.[3]

Most of DOE's Funds Are Used for Contracts

DOE is the largest civilian contracting agency in the federal government, with over 130,000 contractor employees and contract obligations of about $17.6 billion, or about 90 percent of its $19.5 billion in total fiscal year 1990 obligations.

The bulk of DOE's annual contract obligations—about $13.8 billion in fiscal year 1990—goes to M&O contractors who (1) research, produce, and test this nation's nuclear weapons, (2) provide day-to-day management of the agency's national laboratories and the strategic and naval petroleum reserves, and (3) provide security, construction, and other services needed to accomplish DOE's missions. In addition to directly employing over

[2]DOE's Management and Oversight of the Nuclear Weapons Complex (GAO/T-RCED-90-52, Mar. 22, 1990).

[3]Other factors that have contributed to these problems include (1) DOE's emphasis on production over environmental and safety matters, (2) the absence of a specific strategic plan for addressing modernization and environmental problems, and (3) limited technical staff to carry out departmental responsibilities.

130,000 personnel, the M&O contractors also use an indeterminate number of subcontractor employees to accomplish DOE's missions.

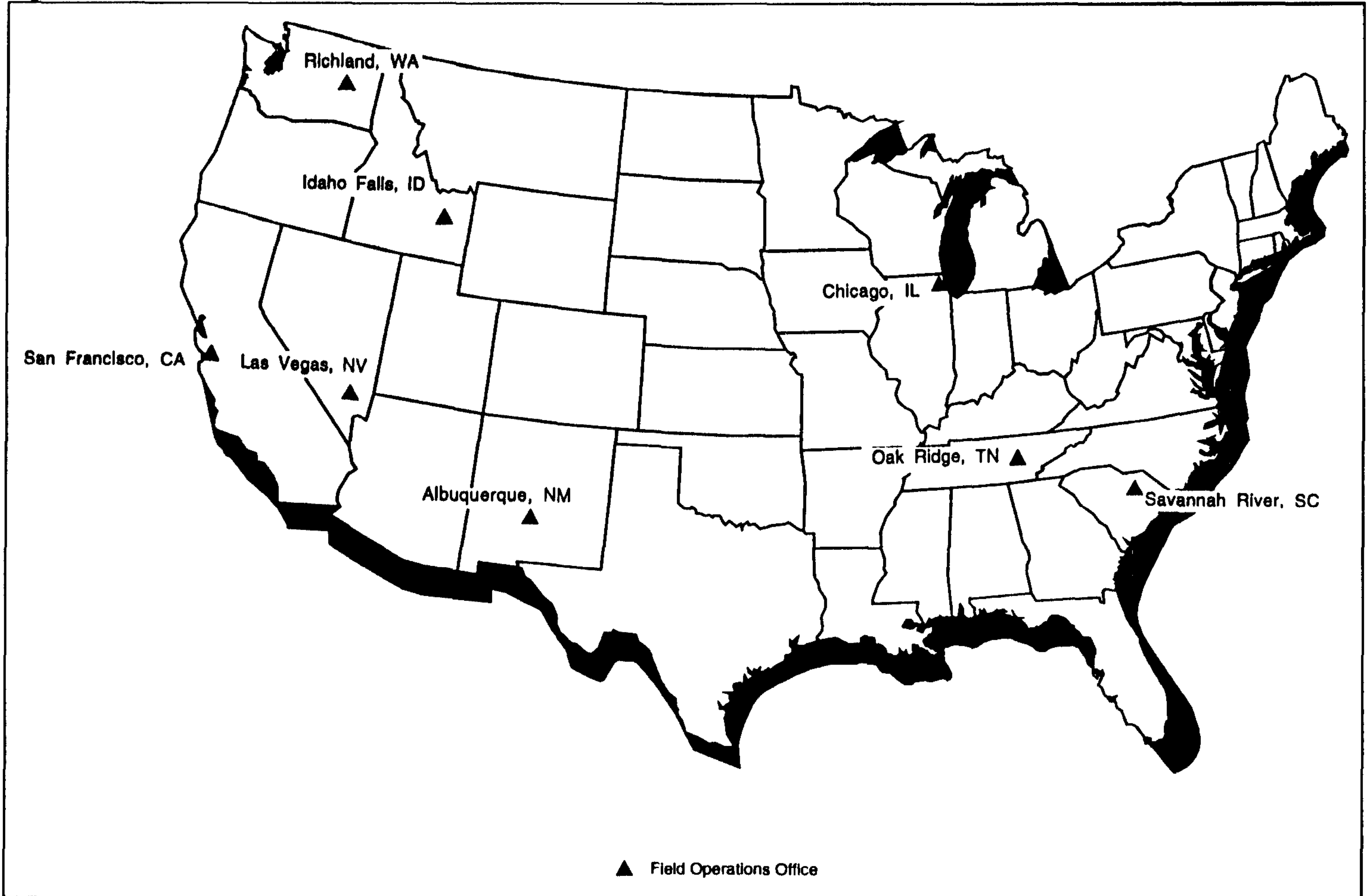
The remainder of DOE's contract expenditures—about $3.8 billion in fiscal year 1990—is for such items as research, construction, telecommunications services, and automated data processing.

DOE's Contracting Organization and Regulations

The structure DOE uses to manage its M&O and non-M&O contracts includes a headquarters organization that sets contract policy and field offices that award and administer contracts. DOE's contracting practices are regulated by both governmentwide and DOE guidance. DOE's Office of Procurement, Assistance, and Program Management has overall responsibility for DOE's contracting. This office is managed by DOE's Senior Procurement Executive, who reports directly to the Deputy Secretary of Energy. The actual award and administration of DOE's 52 M&O contracts is primarily carried out by field offices located throughout the country.

Figure 1.1 shows the location of these offices.

Figure 1.1: Locations of DOE's Field Offices



The contracting practices of federal executive agencies are governed by the Federal Acquisition Regulations System, including the (1) Federal Acquisition Regulation (FAR), which is the governmentwide procurement regulation, and (2) individual agency acquisition regulations that implement or supplement the FAR for activities that are unique to the individual agency. DOE's contracting practices are governed by the FAR and the Department of Energy Acquisition Regulation (DEAR). Additional DOE guidance is provided by internal directives and procedures.

For its M&O contracts, DOE uses FAR provisions but supplements the FAR significantly with its own DEAR provisions. For example, DEAR provisions

are used to cover the negotiation of contract costs and fees, types of contract costs that DOE will pay its contractors, and contractors' subcontract management. DOE issued the DEAR provisions because it believes that its M&O contracts require unique guidance and because the FAR does not provide detailed guidance for M&O contracts.

Finally, the Federal Managers' Financial Integrity Act of 1982 (FMFIA) directed executive agencies to comply with stronger internal controls in the conduct of federal business. These standards, issued by the Comptroller General in 1983, prescribe required internal controls for complying with FMFIA.[4] Applying the standards to the procurement process, an adequate system of internal controls would include

- policies and procedures that, when followed by competent contracting personnel, ensure that the government's interests are adequately protected;
- managers and employees who maintain and demonstrate a positive and supportive attitude toward internal controls;
- an organizational structure to permit the departmentwide management and execution of the contracting function; and
- accurate and reliable contracting information.

GAO Designated DOE's Contract Management as an Area of High Risk

In early 1990, GAO designated DOE's contract management as a high-risk area warranting detailed audit work over the next several years. The high-risk designation refers to our assessment that DOE is highly vulnerable to waste, fraud, abuse, and mismanagement, primarily because of its (1) extensive reliance on contracting and (2) history of inadequate oversight of contractors. DOE's contract management is one of only 16 areas governmentwide that we have designated as high risk.

Objectives, Scope, and Methodology

As requested by the Chairman, Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, the overall objective of this review was to discuss our basis for identifying DOE's contract management as an area that is vulnerable to waste, fraud, abuse, and mismanagement. Specifically, we were asked to discuss (1) problems resulting from DOE's contracting approach that have been identified in reports by GAO and the DOE Office of Inspector General (DOE IG) and (2) the efforts DOE has made to change its management of contractors and to address contracting problems. To satisfy these

[4] Standards for Internal Controls in the Federal Government, GAO, (1983).

objectives, we reviewed reports on DOE's contracting practices prepared by GAO, DOE IG, and other DOE units and federal agencies; DOE's annual FMFIA reports and procurement and financial reports; DOE contracting guidelines, such as notices and directives; and congressional hearings and other historical information about AEC's early contracting practices. We also interviewed DOE's procurement and program office personnel.

We performed our work at DOE headquarters from May 1991 to March 1992 in accordance with generally accepted government auditing standards. As requested, we did not obtain written agency comments on a draft of this report. However, we discussed the facts in this report with appropriate DOE and DOE IG officials, who generally agreed with its accuracy. We have incorporated their comments where appropriate.

DOE's Contracting Approach Has Resulted in Vulnerabilities to Waste, Fraud, Abuse, and Mismanagement

Part of the legacy of DOE's historical contracting approach has been (1) contracts that prevent DOE from effectively managing its contractors and (2) oversight of contractors and their subcontractor activities that has not adequately protected the government's interests. Although the management approach of least interference in contractor activities and indemnification of nearly all contractor costs may have been appropriate when first developed, it has fostered an environment that provides opportunities for waste, fraud, abuse, and mismanagement. Numerous GAO, DOE IG, and internal DOE reviews over the last few years have demonstrated the results of these practices. They include using government funds for unapproved items, missing secret documents, and excessive subcontracting costs. (See Related GAO Products and app. I.)

Ineffective Contracts Weaken DOE's Control

Both GAO and DOE IG reports have identified clauses in some M&O contracts that have weakened DOE's authority to control M&O contractor activities and to ensure the efficient use of federal contract funds. Among other things, these clauses have hampered DOE's ability to change contractor procurement and property management and have restricted DOE's ability to control contractor costs.

Nonstandard Clauses Restrict DOE's Authority

DOE's contracts with the University of California are examples of contracts that have not adequately protected the government's interests. The contracts are for the operation of the Lawrence Livermore, Los Alamos, and Lawrence Berkeley National Laboratories. These contracts contain clauses that differ from the standard clauses for M&O contractors set forth in DOE regulations and include nonstandard clauses on procurement and property management.

We found instances in which the absence of standard procurement and property management clauses has hampered DOE's ability to effect needed changes in the laboratories' procurement and property management practices.[1] For example, the standard clause on procurement requires M&O contractors to comply with DOE's procurement policies. These policies (1) require DOE's approval of leases and purchases of vehicles and (2) provide that the vehicles are generally to be obtained through the General Services Administration (GSA). This requirement can save the government money because GSA's rates are lower than commercial rates. In contrast, the University's contracts omit the requirement to comply with DOE's

[1] DOE Management: DOE Needs to Improve Oversight of Subcontracting Practices of Management and Operating Contractors (GAO/T-RCED-91-79, Aug. 1, 1991) and Energy Management: DOE Has an Opportunity to Improve Its University of California Contracts (GAO/RCED-92-75, Dec. 26, 1991).

purchasing policies for M&O contractors and do not specifically require DOE's approval of vehicle leases.

Deviation from the standard procurement clause provides the University with a rationale for not obtaining DOE's approval of costly vehicle leases. For example, we found that while most of the 1,100 vehicles used at the Lawrence Livermore Laboratory have been approved by DOE, the Laboratory had obtained more than 90 passenger vehicles since 1986 under leases that were not approved by DOE, including 58 vehicles the Laboratory had leased from the University. Furthermore, the vehicles were obtained at rates that were substantially higher—about $600,000 more—than GSA's vehicle leasing rates. For example, a 12-passenger van leased from the University cost $439 per month; a similar vehicle leased from GSA would have cost $151. Finally, if the Laboratory had been required to obtain DOE's approval of the leases, DOE might have determined that some vehicles were not needed; thereby avoiding additional leasing costs.

In addition, the absence of the standard property management clause has hindered DOE's ability to resolve a long-standing disagreement with the Laboratory on the appropriate fleet size for the Laboratory—a 1-square mile site that had more than 1,100 vehicles. In 1986, DOE directed the Laboratory to reduce its fleet size and, in 1990, to terminate some commercial vehicle leases that DOE had determined were not adequately justified. The Laboratory did not comply. Instead, a July 19, 1991, letter from the Laboratory's Deputy Business Manager stated that directions by DOE property management officials to terminate commercial leases were regarded as the "basis for negotiation pursuant to the 'mutually agreed' principle" in the contract's property management clause. While DOE's standard property management clause requires M&O contractors to operate in accordance with DOE property management regulations, the University of California contracts provide for a mutually approved system. According to a DOE property management official, finding an acceptable solution to the vehicle disputes has been difficult and time-consuming because of the requirement for mutual agreement.

Nonstandard Indemnification Clauses Restrict DOE's Ability to Control Costs

The use of nonstandard contract indemnification clauses in some contracts restricts DOE's ability to control contractor costs. These clauses have resulted from DOE's historical practice of indemnifying almost all contractor costs. In a September 1989 report,[2] the DOE IG reported finding,

[2]Indemnification of the Department of Energy's Management and Operating Contractors (DOE/IG-0272, Sept. 22, 1989).

in some contracts, contract clauses that deviated from DOE's standard contract indemnification clauses. These contracts included those with contractors such as AT&T Technologies, the University of California, Allied Corporation, and Mason and Hanger-Silas Mason Company, Inc., who operate large DOE facilities that collectively spend billions of dollars annually. The DOE IG's analysis of these clauses showed that, depending on the type of nonstandard contract clause, DOE could be required to reimburse the contractors for all costs, even those it considers unreasonable, unless it could demonstrate that the expense resulted from the willful misconduct or bad faith of a corporate officer, such as a facility director. Expenses resulting from the willful misconduct or bad faith of other contract employees would be fully reimbursable.

DOE's Interpretation of Environmental Clause Does Not Encourage Contractor Accountability

Because it indemnifies contractor costs, DOE has paid for the environmental penalties that its contractors incurred, in contrast to the practice of the Department of Defense (DOD) whose contractors also manage federal facilities. To illustrate, in October 1989,[3] we reported that DOE had paid over $800,000 for its contractors' Resource Conservation and Recovery Act (RCRA) penalties and related violation costs. DOD had paid nothing. This is because DOD's policy is based on the FAR's general restriction against the payment of penalties and on the premise that contractors are aware of their RCRA compliance responsibilities and should be financially responsible for violations that occur during the normal day-to-day management of facilities they operate. DOE, on the other hand, acted in accordance with its long-held view that contractors should not face any financial risks for performing the uniquely hazardous and technical work required by its contracts. DOE's practice not only reduced its contractors' incentive to comply with RCRA but also could negate the benefits of the Environmental Protection Agency's efforts to seek enforcement actions against contractors who operate DOE's facilities.

Ineffective Contract Clauses Limit Accountability

As discussed in our April 1990 report on the Lawrence Livermore Laboratory's property management system, the lack of the standard property management clause in the University of California contracts, together with a clause that generally protects the University against losses of government property, has fostered a lack of contractor accountability.[4]

[3] Hazardous Waste: Contractors Should Be Accountable for Environmental Performance (GAO/RCED-90-23, Oct. 30, 1989).

[4] Nuclear Security: DOE Oversight of Livermore's Property Management System Is Inadequate (GAO/RCED-90-122, Apr. 18, 1990).

We reported that the Laboratory could not account for about $45 million in government-owned property. Specifically, over 27,000 items (or 16 percent) of the Laboratory's total property management data base could not be located. Furthermore, the Laboratory did not have adequate controls to ensure that property in its custody is safeguarded against theft, unauthorized use, or loss. For example, the Laboratory had not tagged, marked, or otherwise identified as government property some of the items it had acquired for conducting weapons and energy research and development. In addition, there were insufficient physical controls to prevent Laboratory employees and subcontractors from taking government property from the premises without proper authorization. Because the contract between DOE and the University essentially protects the University against the risk of lost, damaged, or destroyed property, the University's accountability for missing items was minimal.

Following this report, the Laboratory told the press that it had found virtually all of the equipment—approximately 99 percent. However, in a May 1991 follow-up report,[5] we found that the Laboratory's claim was inaccurate. First, the Laboratory had excluded over 20,000 noncapital equipment items costing between $500 and $5,000—such as cameras, television equipment, printers, and modems—that were still missing. Second, the Laboratory calculated the percentage of located items on the basis of cost, whereas the percentage of items that we reported as missing was based on the number of missing items. In actuality, the Laboratory had located only about 3 percent of the inventoried equipment. About 13 percent of the inventory, acquired at a cost of $18.6 million, was still missing as of May 1991.

Furthermore, rather than strengthening its property controls, the Laboratory had actually weakened them since April 1990 to eliminate accountability over the government's noncapital equipment. These items constituted over 92 percent of the items that we reported as missing in April 1990. In contrast, the University of California required the accountability of its own property at the $500 level—not the $5,000 level now used for government-owned property at the Laboratory. Therefore, University property is afforded a higher standard of protection than government-owed property at the Laboratory.

[5] Nuclear Security: Property Control Problems at DOE's Livermore Laboratory Continue (GAO/RCED-91-141, May 16, 1991).

DOE's Oversight Is Inadequate to Control Contractors

DOE's contract management approach has also, in many cases, translated to limited oversight of the contractors. This has left DOE's contractor funds and programs vulnerable to waste, fraud, abuse, and mismanagement. GAO's reviews and others have demonstrated that DOE's oversight was inadequate to detect problems in the work contractors performed for non-DOE sources, identify errors in the nuclear materials inventory, properly award fees to contractors, and safeguard secret documents.

Inadequate Controls Over Work for Others

DOE's M&O contractors perform a considerable amount of work that is sponsored by other federal agencies and, to a lesser extent, by nonfederal parties. This work is generally referred to as work for others. In fiscal year 1990, obligations for such work totaled over $1.9 billion, of which approximately $1.8 billion was federal and about $100 million was nonfederal. GAO, the DOE IG, and the National Security Agency have all pointed out weaknesses in DOE's oversight of work for others. As the DOE IG concluded in a September 1991 report,[6] such weaknesses place DOE at risk for financing the sponsors' work. In this report, for example, the DOE IG examined work that Los Alamos National Laboratory had carried out for nonfederal sponsors. The DOE IG found that Los Alamos and DOE's Albuquerque Field Office were not in compliance with applicable funding and accounting requirements. More specifically, the DOE IG found that (1) in 1989 Los Alamos had exceeded sponsor advances of funds by as much as $460,000 and had exceeded its approved budget authority by up to $719,000 and (2) DOE's Albuquerque office had not obtained cost information needed to effectively manage the projects.

An earlier report by the National Security Agency also found serious problems in this area—in particular, that contractors rather than DOE were determining what non-DOE work to accept. The report stated that (1) there were few effective limitations on the work a laboratory could accept so long as it was interested in the work and (2) the absence of DOE control had led to the acceptance of a number of highly questionable projects. The report attributed these problems to "an alarming mind-set" that had developed in some DOE management ranks. The report went on to state:

"Initially, it [the mind set] appears to have sprung from the perception that the multiplicity of projects undertaken by the laboratories and the esoteric technologies involved precluded effective oversight. The basic tenets that the laboratories are in actuality an extension of DOE proper, that their goals and objectives always neatly coincide with those

[6] Financial Administration of Work For Nonfederal Sponsors—DOE Field Office, Albuquerque, New Mexico (WR-BC-91-02, Sept. 30, 1991).

of DOE, and that the Department and the contractor are both members of the same close-knit team have deteriorated into a situation whereby many DOE personnel believe that oversight is unnecessary, and perhaps counterproductive. Simply stated, this philosophy virtually ignores the possibility that a contractor could have a different agenda or anything but motivations that perfectly correspond to those of the government. In this context, the concept of accountability can be seriously-if not fatally-injured."

Nuclear Materials Inventory Errors Not Detected

According to an August 1991 DOE IG report,[7] DOE's nuclear weapons laboratories were not accurately reporting the quantities of nuclear materials they had—inaccuracies ranged from 52 to 88 percent of the items reviewed. As such, nuclear materials were routinely being reported as "in use" or "needed" when they were actually "excess." For example, at Los Alamos National Laboratory, only 31 of 265 items were reported properly. At Lawrence Livermore National Laboratory, 19 items were reported as "in use" when they had, in fact, been in storage for up to 17 years. In another instance, 72 of 112 items of plutonium scrap that Savannah River reported as being held for reprocessing and recovery had been there from 10 to 16 years, and there was no indication of when they would be reprocessed.

In addition, if unneeded nuclear materials are retained at facilities and are reported as needed, the contractor could unnecessarily purchase or undertake expensive recovery of additional nuclear materials. For example, the report found that Sandia National Laboratory had incorrectly reported about $500,000 worth of excess uranium as needed, when it was, in fact, excess. Unaware of the excess, the Office of Nuclear Materials made a fiscal year 1992 budget request to buy $100 million worth of uranium; fiscal year 1990 and 1991 budgets had similar requests.

DOE needs accurate inventory information not only to forecast nuclear materials requirements but also to ensure that environmental problems are not aggravated and that costs for storing nuclear materials are kept at a minimum consistent with safeguard and security requirements. However, according to the DOE IG report, DOE's oversight has been inadequate. For example, DOE's field offices had delegated the preparation of inventory assessments to the operating contractors with little or no guidance, involvement, or oversight, and generally accepted the assessment reports without any question and without making any "test checks" to verify the information.

[7] Departmentwide Audit of the Visibility Over the Status of Nuclear Materials (DOE/IG-0296, Aug. 30, 1991).

Contractor Award Fees Based on Broad Objectives

Consistent with its approach for managing M&O contractors, DOE has established only broad objectives for the contractors and relied on them to plan and carry out programs with little DOE oversight. This approach has contributed to the subjectivity of DOE's evaluation and fee determination process for contractors who operate under cost-plus-award fee contracts. Such award fee contracts account for over half of the M&O contracts. Under these contracts, a portion of a contractor's award fee is based upon the government's evaluation of the contractor's performance.

In October 1991, we reported that potential award fees for contractors reporting to DOE's Albuquerque Field Office in fiscal year 1990 ranged from $4.5 million for the Waste Isolation Pilot Plant to $12.1 million for the Kansas City Plant.[8] Yet, because the performance objectives lacked specificity, DOE's decisions about the millions of dollars awarded to these contractors were highly subjective.

To illustrate, the Albuquerque Field Office's use of performance objectives did not result in effective evaluations of contractors' performance or effectively communicate DOE's expectations to the contractors. Many objectives established by Albuquerque for its M&O contractors were very broadly stated and contained no criteria, standards, or milestones against which to measure contractor performance. For example, one performance objective for the Mound Plant was to "enhance the Industrial Hygiene Program." With such broad objectives, evaluations of contractor performance were highly subjective, causing disagreements and confusion for both DOE units and contractors about how to assess performance.

DOE Oversight Limited in National Security Area

Although DOE's contracting approach was established partly in the interest of national security, DOE's limited oversight in some areas has not resulted in improved security. For example, as we reported in February 1991,[9] DOE's M&O contractor at the Lawrence Livermore National Laboratory could not locate approximately 10,000 of 600,000 secret classified documents relating to such topics as nuclear weapons and laser technology. Safeguarding and controlling secret documents, however, is vital to the national security of the United States.

[8]Energy Management: Tightening Fee Process and Contractor Accountability Will Challenge DOE (GAO/RCED-92-9, Oct. 30, 1991).

[9]Nuclear Security: Accountability for Livermore's Secret Classified Documents Is Inadequate (GAO/RCED-91-65, Feb. 8, 1991).

We also found that DOE's oversight of the contractor's security program had been inadequate. Although DOE's San Francisco Field Office annually evaluates the Laboratory's secret document program, the reviews were limited in scope and none of them had identified a problem with missing secret documents. A 1987 review of the program by DOE headquarters' Office of Security Evaluations also did not detect a problem with missing documents.

Another national security concern is the foreign interests of contractors and their subcontractors. According to our March 1991 report,[10] neither DOE nor its contractor-operated weapons laboratories fully complied with DOE's regulations and procedures for determining whether contractors are owned, controlled, or influenced by foreign individuals, governments, or organizations. Such foreign interests threaten national security because of the potentially uncontrolled transfer of nuclear weapons-related technology or materials to foreign entities. In addition, none of DOE's field offices complied with the requirements in the award of the existing M&O contracts. Also, virtually none (about 98 percent) of the classified subcontracts that the Lawrence Livermore, Los Alamos, and Sandia National Laboratories awarded from October 1987 through March 1990 fully complied with program procedures. Furthermore, DOE had (1) no efficient system to identify all classified contracts awarded by the laboratories, (2) no written guidelines for making foreign ownership, control, or influence determinations, and (3) deficiencies with a questionnaire used to collect foreign-interest information. DOE also devoted limited resources to carry out the required foreign-interest reviews.

Staffing and Resource Limitations Affected Audit Oversight

DOE's limited staffing and resources also has affected the agency's oversight of its 44 integrated M&O contractors.[11] In October 1991, we reported that, because of staffing and resource limitations, the DOE IG had not provided the cyclical audit coverage it had established as necessary to determine if the costs incurred by these contractors were accurate, allowable, and reasonable.[12] As a result, the DOE IG has reported, in his

[10] Nuclear Nonproliferation: DOE Needs Better Controls to Identify Contractors Having Foreign Interests (GAO/RCED-91-83, Mar. 25, 1991).

[11] Integrated M&O contractors (1) have their costs under a cost-type contract prefinanced by DOE and (2) are required to maintain a separate and distinct system of accounts, records, documents, and other evidence showing and supporting all allowable costs incurred, revenues, or other applicable credits. During fiscal year 1990, DOE had 44 integrated M&O contracts and 8 nonintegrated M&O contracts.

[12] Energy Management: Contract Audit Problems Create the Potential for Fraud, Waste, and Abuse (GAO/RCED-92-41, Oct. 11, 1991).

semiannual reports to the Congress, that DOE managers lack adequate assurance that DOE's major contractors are operating economically, efficiently, and in the federal government's best interest.

DOE's Subcontracting Oversight Is Inadequate

DOE also has not adequately overseen funds that its M&O contractors spend on subcontractors—a $5 billion expenditure in fiscal year 1990. DOE's system for reviewing subcontracting—its Contractor Purchasing System Review (CPSR) Program—has identified numerous weaknesses among DOE's contractors, such as insufficient subcontract competition and the circumvention of DOE approval of subcontracts.[13] However, the review program has had its own basic weaknesses that have limited its effectiveness in improving M&O contracting.

Subcontracting Weaknesses Evident Throughout DOE

DOE's limited oversight and the M&O contractors' poor procurement practices have contributed to the subcontracting weaknesses that DOE's CPSR program and we have identified in recent reviews. Reports from 37 of the 40 DOE reviews conducted during the most recent 3-year cycle[14] revealed fundamental deficiencies in contractors' subcontracting activities. These weaknesses have led to contractors' incurring excessive subcontract costs.

Inadequate Competition

Insufficient competition for subcontracts and questionable sole-source justifications were among the major weaknesses identified in M&O contracting. Lack of competition in contracting can limit the government's ability to obtain the best contract terms. Yet, more than half of DOE's reviews identified questionable sole-source purchases. For example, 19 percent of the purchases DOE reviewed at Stanford University's Linear Accelerator Center did not contain adequate justification for using sole sources. The subcontracts totaled about $445,000. In another instance, at Westinghouse's Waste Isolation Pilot Plant, all but one support service subcontract DOE examined were sole-source. Each of the subcontracts started with purchases that had a relatively small dollar value for limited periods and scope of services; each escalated into high-dollar value, long-term subcontracts. Finally, at Allied-Signal Aerospace, Inc.'s Kansas City Plant, DOE reported that it appeared that the same sources were being used repetitively and that no new sources were being sought on most actions.

[13]Energy Management: DOE Actions to Improve Oversight of Contractors' Subcontracting Practices (GAO/RCED-92-28, Oct. 7, 1991).

[14]DOE generally conducts reviews of each M&O contractor's purchasing system once every 3 years.

Although DOE did not estimate the extent of overpricing that is likely to be associated with insufficient competition and other identified subcontracting weaknesses, we concluded that millions of dollars may be wasted each year.[15] Our December 1991 report on the Lawrence Livermore Laboratory also demonstrates the lack of competition and indicates just how costly a sole-source purchase can be. The Laboratory's lease of up to 58 vehicles from the University of California—Livermore's M&O contractor—was sole-source and cost about $987,000. Had the Laboratory leased the vehicles from the General Services Administration, we determined that the cost would have been $396,000—or a savings of $591,000.

Circumventing Requirements

Another significant subcontracting weakness that DOE's reviews identified is contractor circumvention of DOE's requirements. As part of its contractor oversight, DOE must approve all subcontracts over a certain amount. However, some contractors appeared to manipulate the system to avoid DOE's review, thus further limiting DOE's oversight. For example, we reported that the Lawrence Livermore National Laboratory had split its initial procurement of the vehicles it obtained from the University of California into three purchase orders, thereby avoiding a requirement for DOE's advance approval of all transactions with the University over $100,000.

DOE's reviews also identified two similar cases at Westinghouse Idaho Nuclear Company, Inc. In one case, the initial subcontract award was just under the DOE approval threshold. Over the course of the next 11 months, the subcontract was modified to increase the price four times. According to a memorandum of conversation in the file, dated just prior to the fourth modification, a program official requested that the subcontract be increased by $60,000. The memorandum further related that when the program official was informed that such modification would require DOE approval, he stated he would correct that amount and would send a revised estimate. In the other case, a solicitation was issued for consulting services. However, the subcontract awarded, in excess of $30,000, was not a consulting agreement, but rather a support services subcontract. When a member of DOE's review team questioned the subcontract administrator about the reason for the change, the subcontract administrator admitted that the change was made to avoid having DOE approve the subcontract. Such practices prevent DOE from exercising appropriate oversight and

[15] DOE Management: DOE Needs to Improve Oversight of Subcontracting Practices of Management and Operating Contractors (GAO/T-RCED-91-79, Aug. 1, 1991).

raise questions about whether the contractors are acting in the best interest of the government.

Other Subcontracting Weaknesses

Inadequate price analysis is another primary weakness that DOE's reviews have identified. Thirty-seven of DOE's 40 reviews disclosed that contractors were not adequately performing and documenting basic analyses that ensure that subcontract prices were fair and reasonable. For example, DOE found that one contractor demonstrated an overall lack of awareness of the importance of establishing fair and reasonable prices, and another contractor generally accepted cost proposals at face value.

Other weaknesses included contractors changing the scope of existing subcontracts when new contracts should have been used and awarding subcontracts after work on the contracts had already begun. For example, DOE found that an "inordinate number" of requisitions were submitted after the fact at the Lovelace Biomedical and Environmental Research Institute and a number of purchase orders were executed after performance was initiated at the Solar Energy Research Institute. Such practices provide opportunities for waste, fraud, abuse, and mismanagement of federal funds.

DOE's Subcontracting Reviews Contain Weaknesses

DOE's CPSR program has identified numerous and pervasive subcontracting weaknesses. However, we found that the review program itself had fundamental weaknesses that have restricted its ability to identify all significant subcontracting problems and to ensure that identified problems are corrected. As a result, lax subcontracting practices, such as those identified here, could go uncorrected, continuing to make government funds vulnerable to waste, fraud, abuse, and mismanagement.

First, DOE did not ensure that all procurement activities were reviewed. Although DOE was aware that some reviews did not examine all purchasing criteria, GAO found that DOE did not require the field offices to follow the guide that describes these criteria. Furthermore, DOE headquarters' examination of field offices' reviews were not sufficient to determine whether the reviews were adequate in depth and scope.

Second, when the reviews identified weaknesses, DOE did not ensure that contractors took appropriate corrective action. Although DOE required its field offices to submit plans describing oversight actions that would be performed to correct identified deficiencies, almost half of DOE's field offices had not submitted such plans during the last 3-year review cycle. In

addition, many of the submitted plans included broad descriptions of the planned oversight, such as reviewing the effectiveness of contractor responses to review recommendations, rather than specific tasks to be performed.

Finally, DOE was reluctant to limit a contractor's purchasing authority even when reviews had identified serious deficiencies. For example, according to a DOE report, DOE should have either withheld or withdrawn contractors' purchasing system approvals (e.g., by reducing the level of contracting authority) in several cases during the 1990 reviews until the contractors had corrected all major deficiencies. However, such action was not taken.

Conclusions

DOE's historical approach to managing contractors has not resulted in the efficient and effective use of government funds. Our reviews, as well as reviews by the DOE IG, DOE internal reviews, and other agencies have repeatedly identified contract management weaknesses throughout DOE. A number of factors have contributed to the problems identified in these reports, including

- contract clauses that have limited DOE's ability to direct contractor actions and hold contractors accountable for their actions;
- insufficient DOE resources for contract administration functions;
- an organizational structure that has not promoted accountability at both the headquarters and field office levels;
- contracting systems that have not protected the government's interests; and
- inadequate DOE reviews of contractor programs, systems, and activities.

More fundamentally, however, the problems identified in these reports stem from the contract management approach that has dominated DOE—an approach that has too frequently embodied the concepts of least interference in contractor activities and routine indemnification of contractor costs. Clearly, a new contract management approach is needed. The new approach should promote adherence to standard contracting practices, hold contractors accountable for their stewardship of federal funds, and recognize that quality research and effective management can and must go hand in hand. DOE's efforts to revamp its contract management philosophy are discussed in chapter 3.

DOE's Changes Will Take Time and Commitment

DOE recognizes that it has significant contract management problems and is making changes in the way it manages its contractors. DOE identified contract management as a material weakness in internal controls in its three most recent Federal Managers' Financial Integrity Act (FMFIA) reports. Some of the actions DOE has taken include establishing a culture in which contractors are held more accountable for their actions and improving its oversight of contractors and subcontractors. Although these actions are a step in the right direction, changing the way the agency has basically conducted its business for over 4 decades will not come easily or quickly. Because it will take time to correct DOE's contract management problems, we will continue to monitor work in this area over the next several years.

DOE Recognizes Need to Improve Contracting

DOE recognizes the need for overall improvements in contract management, particularly in its administration of M&O contracts. The Secretary of Energy's fiscal year 1989, 1990, and 1991 FMFIA reports to the President identified DOE's contract management as a material weakness. Executive agencies are required to report weaknesses in their internal controls as material when the deficiency significantly impairs the fulfillment of a mission or significantly weakens safeguards against waste, loss, unauthorized use or misappropriation of funds, property, or other assets, among other things. Such was the case in DOE's contract management.

The 1989 report, for example, noted significant deficiencies in DOE's contract management practices, particularly the agency's contracts with M&O contractors. The problems had been previously identified by Department management and GAO and DOE IG audits. Some specifics observations included the following: (1) corrective actions were required to ensure that contractor compensation rewards excellence and penalizes unsatisfactory performance, (2) cost allowability and performance expectations needed to be better defined to prevent the recurrence of situations in which DOE is responsible for a contractor's fraudulent or otherwise unacceptable actions, (3) oversight of prime contracts and subcontracts needed to be improved to ensure that the work performed is acceptable and in compliance with laws and regulations, and (4) improvements were needed to implement federal requirements for major system acquisitions.

The Secretary's FMFIA reports also discuss actions to correct the deficiencies, including

- improving DOE's oversight of contractors and subcontractors to ensure that their work is acceptable and in compliance with contract requirements, applicable laws, and regulations;
- restructuring DOE's major system acquisition program to increase accountability; and
- hiring additional employees and improving the quality and technical training of DOE's work force to allow it to monitor contractors' performance.

DOE Is Making Changes in Contract Management

The Secretary has taken a number of actions, some completed and some under way, to correct the identified contracting deficiencies. These actions focus on DOE's operating approach and oversight of contractors and subcontractors. Additionally, both our past reports and reports by the DOE IG have made a number of recommendations to DOE to correct the problems identified in such areas as property management, classified documents, and the nuclear materials inventory. DOE has acted on many of these recommendations.

Development of a New Management Approach

One of the major changes is the Secretary's overall objective to develop and instill a new management approach, or culture, in DOE. According to the Secretary, the new culture embraces the development of (1) a compatibility between DOE's mission to produce defense materials and protection of the environment, which is intended to replace 40 years of emphasis on production at the expense of the environment, (2) a workplace culture that demands excellence and personal accountability, which is intended to replace DOE's ambiguous lines of authority, and (3) an atmosphere that welcomes openness and constructive criticism, which is intended to replace DOE's practice of making decisions under the cloak of collegial secrecy.

Incorporating New Contract Clauses

Another contracting improvement that DOE has initiated is changing contractor clauses to make contractors more accountable and to better direct their actions. In 1990 DOE changed its award fee structure to specifically focus some contractors' attention on environmental, health, and safety issues—areas in which there have been significant problems—while increasing these contractors' accountability for all other aspects of their operations. Specifically, it (1) required that at least 51 percent of the available award fee on M&O contracts involving defense production facilities be based on the contractors' compliance with

environmental, safety, and health requirements and (2) authorized DOE to deny the contractors' entire award fee if any area of the contractors' performance was evaluated as unacceptable. Furthermore, if DOE rates a contractor's performance as either marginal or unsatisfactory, a portion of the contractor's base fee also may be at risk.

In June 1991 DOE published a final rule that further revised the award fee structure for for-profit M&O contractors. The rule also affects the types of costs that these contractors may charge DOE. Under this rule, DOE will (1) hold the contractors, rather than the government, responsible for costs (such as fines and penalties) that could have been avoided by proper contract performance and (2) increase the potential fees of contractors to balance the increase in their financial risk. DOE plans to incorporate these provisions in the 32 for-profit contracts when they are renewed. The remaining 20 contractors will not be affected because they have been classified as nonprofit organizations.

DOE is also taking actions to strengthen its contracts with one of its nonprofit contractors, the University of California, as part of the agency's process for negotiating the extension of contracts with the University for the operation of the Lawrence Livermore, Los Alamos, and Lawrence Berkeley National Laboratories. On July 24, 1991, the Secretary of Energy announced that DOE would negotiate with the University of California to restructure these contracts. The contracts expire in September 1992. According to DOE's Deputy Director for Procurement, DOE's objective is to negotiate contracts that include as many standard clauses as possible. DOE's goals include eliminating the mutuality concept in the contract clauses that address business management, such as the procurement systems clause, and negotiating an allowable costs clause that better protects the government's interests.

In another effort, DOE is planning to refine the statement of work clauses in M&O contracts to increase accountability over the contractors' expenditure of funds and performance of work. DOE refers to this as its "task order" method of contracting on M&O contracts. When incorporated into the M&O contracts, the new method would require that each of the contractor's tasks be specifically authorized by DOE before work can begin or monies can be obligated. DOE believes that the new approach will enable it to maintain better control of the contractors' operations.

Improving Contractor Oversight

The Secretary also made organizational and staffing changes to improve contract management. One change was the establishment of an Office of

Procurement, Assistance and Program Management whose head, DOE's Senior Procurement Executive, reports directly to the Deputy Secretary of Energy. The predecessor organization had reported through a Deputy Assistant Secretary, who reported to the Assistant Secretary, Management and Administration. This change elevated DOE's Senior Procurement Executive and contracting function to a position with direct access and comparable equality to the heads of DOE's major organizational elements. Such a level is required by federal contract law to ensure effective management of the contracting function.

To improve its major systems and acquisition program, DOE took several actions, including implementing a more stringent review process for proposed systems and projects, subjecting more systems and projects to increased oversight, and strengthening the authority of managers with responsibility for managing the systems and projects.

In another change affecting contract management, the Secretary gave program organizations in headquarters responsibility for the operation of specific DOE field offices. This change is intended to establish clear lines of management accountability at both headquarters and field offices. Furthermore, as part of his efforts to correct the environmental, safety, and health problems at DOE's facilities, the Secretary created a new Office of Environmental Restoration and Waste Management, which is responsible for overseeing DOE's cleanup effort. Prior to this office, programs responsible for these activities were spread among three different organizations. Additionally, the Secretary ordered the development of DOE's 5-year plan to set priorities for the cleanup effort.

Finally, to improve the quality and expertise of its program and contracting staff, DOE has established an Office of Scientific and Engineering Recruitment, Training, and Development. DOE's fiscal year 1990 FMFIA report stated that the efforts of this office had met with limited success and that DOE's staffing levels remained considerably below its requirements. However, according to the latest FMFIA report, DOE now believes that the recruitment and hiring of additional employees in 1992 will significantly address weaknesses in this area.

Improving Subcontractor Oversight

DOE has also announced changes in its program to review contractor purchasing systems in order to strengthen subcontractor oversight. Under the new procedures, DOE headquarters officials will determine whether to approve or disapprove contractors' purchasing systems and will establish

the appropriate thresholds for advance DOE approval of M&O subcontract actions. In addition, (1) future reviews are to be conducted in accordance with DOE's Contractor Purchasing System Review Guide, (2) DOE headquarters staff will assume leadership roles for the reviews, and (3) DOE headquarters will establish new accountability standards for field offices to ensure that contractors take appropriate actions to correct identified procurement deficiencies. DOE also plans to increase its headquarters staff for review program activities and to require that field offices dedicate staff full-time to the review program.

Changes Will Take Time and Effort

Correcting the contract management problems that face DOE will be difficult and time-consuming. Many of the changes are in the early stage of implementation, their actual success in correcting contracting weaknesses will not be known for several years. Foremost among the issues that need to be addressed is the old corporate culture, which includes the contract management approach. The contracting culture that the Secretary seeks to change was 40 years in the making and will not be easily replaced among DOE's management, employees, and M&O contractors.

The difficulty of changing DOE's culture was discussed in a December 1990 report by the Department of Labor's Occupational Safety and Health Administration (OSHA) on eight M&O contractors. The report found that in spite of DOE efforts to emphasize safety and health concerns at contractor facilities, DOE "remains a mission-directed, production-oriented organization in which pressures to get the job done often overrule safety and health concerns." OSHA also found sloppy recordkeeping on accidents at the facilities, poor safety and health training, and management indifference to occupational safety and health programs. Similarly, a November 1991 report by DOE's Advisory Committee on Nuclear Facility Safety found that, although there have been positive safety changes at DOE, significant deficiencies remain. For example, the Committee noted a growing reluctance among DOE and contractor organizations to identify problems or admit a lack of progress to DOE management. In this regard, the Committee specifically found that the "Inculcation of the 'new culture' has gone slowly, and we have heard many accounts suggesting upper management unwillingness to receive bad news."

Other changes will also require a considerable effort to implement. The accountability rule is one example, as we stated in our October 1991 report on DOE's award fee program. To achieve the intended increase in contractor accountability, DOE must (1) incorporate the new requirements

into each new or renewed contract, (2) develop day-to-day operational procedures that will identify all avoidable costs and hold the contractors accountable for them, and (3) train the staff to implement the accountability procedures in a timely manner. If DOE's efforts in these areas are not effective, the contractors may receive a larger award fee without actually incurring any additional liability.

DOE has also recognized that these changes will take time. Although the Secretary's FMFIA report for fiscal year 1990 stated that contract management initiatives would be completed in 1992, more recent statements appear to recognize that the changes will not be as easy as originally envisioned. For example, in discussing DOE's achievements over the past 2 years in his statement accompanying DOE's fiscal year 1992 budget, the Secretary stated that

> "From the onset it was clear that instilling a new corporate culture would take time and that new challenges and changing circumstances would require revisions to planned timetables."

GAO's Oversight Plans

Because it will take time to correct DOE's contract management problems, we will continue to monitor this area over the next several years. As part of this effort, we will (1) assess whether DOE's corrective actions adequately address identified problems and (2) determine what additional actions may be needed to correct other deficiencies in DOE's contracting practices. Among the areas that we are now examining are DOE's (1) controls over contractor costs, (2) controls over contractors' technology transfer activities, (3) controls over environmental restoration contracting, and (4) efforts to improve controls over contractors' reimbursable work. Other aspects of DOE's contract management will be addressed in future assignments.

Conclusions

The Secretary of Energy's recognition of contract management as a serious problem area, his commitment to strengthen controls over contractors, and his specific actions to correct the problems are important first steps toward addressing some of the long-standing concerns we and others have identified.

Although progress has been made, we do not believe that DOE's contracting problems will be corrected in the near future. The actions taken to date are broad policy initiatives whose actual implementation will take years

and will need to be implemented by DOE's management, employees, and contractors. As indicated by the OSHA study, DOE's Advisory Committee on Nuclear Facility Safety report, and our ongoing reviews, correcting DOE's contract management deficiencies will require a long-term, persevering effort. Until these corrections are completed, DOE's contract management remains susceptible to waste, fraud, abuse, and mismanagement. Therefore, we plan to maintain a significant presence in this area.

DOE Office of Inspector General Reports

Financial Administration of Work For Nonfederal Sponsors—DOE Field Office, Albuquerque, New Mexico (WR-BC-91-02, Sept. 30, 1991).

Departmentwide Audit of the Visibility Over the Status of Nuclear Materials (DOE/IG-0296, Aug. 30, 1991).

General Management Inspection of the San Francisco Operations Office (DOE/IG-0290, Sept. 20, 1990).

Departmentwide Audit of Carrier Selection and Invoice Verification (DOE/IG-0278, Nov. 29, 1989).

Indemnification of the Department of Energy's Management and Operating Contractors (DOE/IG-0272, Sept. 22, 1989).

Salary Administration Practices, Sandia National Laboratories, Albuquerque, New Mexico (DOE/IG-0266, Mar. 20, 1989).

Major Contributors to This Report

Resources, Community, and Economic Development Division, Washington, D.C.

James E. Wells, Jr., Associate Director, Energy Issues
Richard A. Hale, Assistant Director
Robert M. Antonio, Assignment Manager
Kathleen J. Turner, Evaluator-in-Charge
Sandra J. Eggart, Senior Evaluator

Related GAO Products

Energy Management: DOE Has an Opportunity to Improve Its University of California Contracts (GAO/RCED-92-75, Dec. 26, 1991).

Energy Management: Tightening Fee Process and Contractor Accountability Will Challenge DOE (GAO/RCED-92-9, Oct. 30, 1991).

Energy Management: Contract Audit Problems Create the Potential for Fraud, Waste, and Abuse (GAO/RCED-92-41, Oct. 11, 1991).

Energy Management: DOE Actions to Improve Oversight of Contractors' Subcontracting Practices (GAO/RCED-92-28, Oct. 7, 1991).

DOE Management: Improvements Needed in Oversight of Procurement and Property Management Practices at the Lawrence Livermore National Laboratory (GAO/T-RCED-91-88, Aug. 20, 1991).

DOE Management: Management Problems at the Three DOE Laboratories Operated by the University of California (GAO/T-RCED-91-86, July 31, 1991).

Nuclear Security: Property Control Problems at DOE's Livermore Laboratory Continue (GAO/RCED-91-141, May 16, 1991).

Nuclear Nonproliferation: DOE Needs Better Controls to Identify Contractors Having Foreign Interests (GAO/RCED-91-83, Mar. 25, 1991).

Nuclear Security: Accountability for Livermore's Secret Classified Documents Is Inadequate (GAO/RCED-91-65, Feb. 8, 1991).

Energy Reports and Testimony: 1990 (GAO/RCED-91-84, Jan. 1991).

Energy: Bibliography of GAO Documents, January 1986-December 1989 (GAO/RCED-90-179, July 1990).

Nuclear Security: DOE Oversight of Livermore's Property Management System Is Inadequate (GAO/RCED-90-122, Apr. 18, 1990).

Hazardous Waste: Contractors Should Be Accountable for Environmental Performance (GAO/RCED-90-23, Oct. 30, 1989).

Energy Management: DOE Should Improve Its Controls Over Work for Other Federal Agencies (GAO/RCED-89-21, Feb. 9, 1989).

Ordering Information

The first copy of each GAO report is free. Additional copies are $2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20877

Orders may also be placed by calling (202) 275-6241.

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

Official Business
Penalty for Private Use $300

First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100