United States General Accounting Office

GAO

Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives

May 1991

NUCLEAR SECURITY

Property Control Problems at DOE's Livermore Laboratory Continue

GAO/RCED-91-141

GAO

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

Resources, Community, and
Economic Development Division

B-243779.1

May 16, 1991

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

Dear Mr. Chairman:

In April 1990, we reported that the Department of Energy's (DOE) Lawrence Livermore National Laboratory, located in Livermore, California, was unable to locate 16 percent of its inventory of government-owned equipment.[1] Following the report's release, laboratory officials reported to the press that most of the inventoried equipment—about 99 percent—had been found. As requested, we determined (1) whether the laboratory's claim was accurate and (2) whether controls over government-owned property at the laboratory have been strengthened following our report. In addition, we examined the adequacy of DOE's oversight with respect to the changes made in property controls.

Results in Brief

The laboratory's claim that most of the missing equipment has been found is inaccurate. First, in reporting that it had found over 99 percent of the inventoried equipment, the laboratory excluded over 20,000 non-capital equipment items that are still missing.[2] Non-capital equipment includes such items as cameras, television equipment, printers, and modems. According to laboratory officials, they excluded non-capital equipment purchased before 1985 because this equipment is old and currently of low dollar value. An accurate comparison with our reported figures requires the inclusion of all equipment originally inventoried and identified as missing, regardless of age or dollar value. Second, the laboratory's reported percentage of located items was based on cost, whereas the percentage of items that we reported as missing was based on the number of missing items. Taking these factors into consideration, only about 3 percent of the inventoried equipment, acquired at a cost of

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

[2]We use the term "non-capital equipment" to describe and discuss equipment costing between $500 and $5,000. It is not used in the context of property, plant, or equipment accounting standards as described and contained in the GAO Policy and Procedures Manual for Guidance of Federal Agencies, Title 2.

$26.8 million, has been located. About 13 percent of the inventoried equipment, acquired at a cost of $18.6 million, is still missing.

Rather than being strengthened, the laboratory's property accountability controls, overall, have actually been weakened since April 1990. In response to our report, DOE required the laboratory to develop a property management system. As a first step, the laboratory developed a property management policy manual. While the policies outlined in this manual may improve equipment management in some areas, such as the marking and tagging of government property, property accountability controls will be eliminated over all non-capital equipment, or 81 percent of the government-owned property items previously accounted for in the laboratory's property management data base. According to the laboratory, one reason for eliminating accountability controls over non-capital equipment is that it is not cost-effective to do so. Yet, the University of California, the contractor for the laboratory, accounts for its own property acquired at $500 or above.

In addition, DOE's oversight of the changes made in laboratory property controls since April has been inadequate. DOE's San Francisco Operations Office, which has oversight responsibility for property management at the laboratory, approved the laboratory's new property management policy manual without ensuring that the approved policies were consistent with federal and departmental property management regulations.[3] According to DOE headquarters, the manual's approved policies are incomplete and fall short of providing adequate protection for government-owned property in the laboratory's custody. Efforts are ongoing to expand the policy manual into a policy/procedures manual that will address the noted deficiencies, according to Operations Office officials.

Background

The Lawrence Livermore National Laboratory performs nuclear weapons research and development. DOE owns the laboratory and contracts with the University of California to operate it. Under the contract, the university is responsible for managing the laboratory's government-owned equipment, with oversight from DOE's San Francisco Operations Office. DOE headquarters, through its Office of Procurement,

[3]Federal requirements for control and accountability of government-owned property are contained in the Federal Property Management Regulations (41 CFR Chapter 101) issued by the U.S. General Services Administration. The DOE Property Management Regulations (41 CFR Chapter 109) are parallel to the federal regulations and serve to implement and supplement them. Also applicable is the GAO Policy and Procedures Manual for Guidance of Federal Agencies, Title 2, which sets forth the accounting and internal control standards to be followed by executive agencies.

Assistance and Program Management, also provides oversight of the laboratory's property management system by providing policy guidance to the Operations Office.

The Laboratory's Claim Is Inaccurate

In May 1989, as recommended by DOE, the laboratory began its comprehensive inventory of government-owned property in its management data base, including essentially all capital, non-capital, and attractive items.[4] In general, capital equipment denotes property with an acquisition cost of $5,000 or more and attractive items include those with an acquisition cost of at least $150 and judged by laboratory managers as prone to theft. Periodically, during the inventory, the laboratory provided DOE and us with inventory status reports showing the amount of missing equipment in all three categories. Using these figures, we reported that as of mid-January 1990, laboratory managers could not locate 16 percent, or 27,528, of the items recorded in the laboratory's property management data base. After our report was issued, laboratory management, in discussing the report with the press, claimed that our reported figures were a misrepresentation of its inventory and that only about 1 percent, not 16 percent, of the equipment was missing.

The laboratory's claim is inaccurate for two reasons. First, in calculating that it had found 99 percent of its inventory, the laboratory excluded from its analysis all missing non-capital equipment items purchased before 1985—items that had been included in the laboratory's mid-January 1990 analysis. These items, totaling over 20,000 in number, constitute over 73 percent of the missing inventory that we reported. Second, the laboratory used a different basis than we did for calculating and reporting the missing item percentages. While we reported that 16 percent of the number of items in the data base were missing, the laboratory's statement that it had located 99 percent of its inventory was based on the acquisition cost of the items (after excluding the non-capital items purchased before 1985).

According to laboratory officials, after the May 1989 inventory they focused their resources on locating the missing capital and attractive items. Subsequently, they began efforts to locate the missing non-capital

[4]The inventory excluded about 20,000 equipment items, including equipment located off-site, non-DOE property, equipment held for future projects, property previously determined to be excess, vehicles, and trailers.

equipment. However, they excluded the non-capital equipment purchased before 1985 because of their perception that it was of little value or use.

While DOE Operations Office officials agree that much of this equipment may be of little current dollar value and efforts to locate it may be costly, they disagree that an arbitrary date, such as pre-1985, should be used as a cut-off point for searching for the equipment. They maintain that an analysis of the equipment is needed to determine the type of missing equipment and its corresponding useful life before a decision can be made on how best to deal with the equipment in question. Operations Office and laboratory officials are currently discussing resolution of this issue.

Regardless of the age or current dollar value of the missing equipment, an accurate comparison to our reported figures requires the inclusion of all the equipment that was originally inventoried and identified as missing. Likewise, the number of items found should be compared with the number of items we reported as missing, not the cost. Taking these factors into consideration, only about 3 percent of the inventoried equipment, acquired at a cost of $26.8 million, has been located. About 13 percent of the inventoried equipment, acquired at a cost of $18.6 million, is still missing.

Laboratory Controls Over Government-Owned Equipment Have Been Weakened

In our report, we noted that the laboratory did not have adequate controls to ensure that property in its custody was 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 use at the laboratory. In addition, we noted that there were insufficient physical controls to prevent laboratory employees and subcontractors from leaving the laboratory with government property without proper authorization. We concluded that when such weaknesses are taken together, the likelihood of detecting theft of government property is low.

In response, DOE's San Francisco Operations Office directed the laboratory to, among other things, develop a property management system consistent with federal and departmental property management regulations and with sound business practice. As a first step, the laboratory subsequently submitted a proposed policy manual to the Operations Office on August 1, 1990. The Operations Office approved the manual on August 31, 1990. While the policies contained in this manual may

improve equipment management in some areas, such as physical controls and the marking and tagging of capital and attractive property, property accountability controls, such as the use of a unique identification number and tracking in the laboratory's property management data base, will be eliminated over non-capital equipment items. These items, costing between $500 and $5,000, account for 81 percent of the government-owned property items and 23 percent of the value of the items previously recorded in the laboratory's property management data base.

Laboratory management stated that they are justified in dropping non-capital equipment from their data base because there is no specific DOE requirement to maintain accountability over such equipment. They also maintain that it is not cost-effective to account for this equipment. Neither of these reasons provides adequate justification for eliminating accountability controls over all non-capital equipment. Some items, regardless of dollar value, may still need to be controlled.

While there is no specific dollar threshold provided for in federal or departmental regulation for controlling non-capital equipment, GAO's Standards for Internal Controls in the Federal Government states that as part of safeguarding government property, adequate internal controls are needed to help prevent against waste, loss, unauthorized use, and misappropriation of assets. We demonstrated in our report that controls over all types of equipment at the laboratory were inadequate but particularly so for non-capital equipment. Specifically, non-capital equipment was identified as having the greatest number of items lost—over 92 percent of the reported missing items. And, 1 year later, over 20,000 non-capital equipment items are still missing. Such a large number of missing equipment items do not provide assurance that government-owned property in the laboratory's custody is being adequately safeguarded and protected. Therefore, dropping accountability over non-capital equipment because there is no specific regulatory requirement to do so is not an adequate justification, nor does it relieve the laboratory of its responsibility to maintain proper control of property.

Similarly, the laboratory's argument that it is not cost-effective to control non-capital equipment can be discounted as justification for eliminating accountability controls over the equipment in question. GAO's Standards for Internal Controls in the Federal Government requires that internal control systems provide reasonable assurance that the objective of the systems can be accomplished. In defining reasonable assurance, the standard states:

"The standard of reasonable assurance recognizes that the cost of internal control should not exceed the benefit derived. Reasonable assurance equates to a satisfactory level of confidence under given considerations of costs, benefits, and risks [emphasis added]."

Adding or deleting internal controls calls for judgment. In exercising such judgment, the standards require agencies to identify risks; establish criteria for determining low, medium, and high risks; and determine acceptable levels of risk under varying circumstances. Laboratory officials stated that in eliminating accountability controls over non-capital equipment, they did not assess the associated risks, nor did they determine whether the costs of this internal control exceeded or was commensurate with the risks to be avoided. Therefore, the laboratory has an inadequate basis for stating that it is not cost-effective to control non-capital equipment.

More importantly, however, the University of California's accountability controls over equipment at the laboratory are inconsistent with the controls over its own property. The University of California requires the accountability of its own property at the $500 level—not the $5,000 level now used on government-owned property at the laboratory. This inconsistency suggests that the university's property warrants greater protection than that paid for by the nation's taxpayer.

DOE's Oversight of Property Control Changes Has Been Inadequate

Our report criticized DOE's oversight of the laboratory's property management system. Among other things, we noted that DOE had not required inclusion of its standard property management provision in the contract with the University of California. This provision is normally included in all DOE management and operating contracts. It requires that a contractor maintain and administer a property management system in accordance with sound business practice and with DOE's property management regulations. Moreover, in lieu of this provision, DOE had not developed or provided guidance to the laboratory, spelling out alternative criteria for performing the laboratory's property management functions. As a result, we concluded that DOE could not provide assurance that government-owned property at the laboratory was being adequately safeguarded and protected.

DOE agreed with the thrust of all our recommendations made to enhance accountability over government-owned property at the laboratory and to improve DOE's oversight of the laboratory's property management system. As a result, the laboratory developed, and the DOE San Francisco

Operations Office approved, the new property policy manual. Although Operations Office officials maintain that this manual does not constitute the final approved property management system,[5] review and approval of the manual has been the primary mechanism used by the Operations Office to oversee development of the laboratory's property management system.

A review of the approved manual by DOE headquarters' Property and Equipment Management Division during September and October 1990 concluded that

"... the (approved) policies are incomplete and do not sufficiently address the issue of ... oversight and control of ... property management ...."

Several discrepancies between the approved policies and federal and departmental regulations were highlighted as a result of the DOE headquarters' review. For example, DOE regulations define equipment as nonexpendable property that has an anticipated life of 1 year or more. The laboratory's new policies describe equipment as property with an anticipated life of 2 years or more. The effect of these policies is that less government-owned property qualifies for inclusion in the property records under the laboratory's policies than would qualify under federal regulation.

The headquarters review also noted that the Operations Office had not developed property management instructions providing guidance to contractors regarding implementation of the department's property management regulations. In the absence of such instructions, the Property and Equipment Management Division concluded that property management policies must be comprehensive and include all provisions of the applicable regulations. The review went on to say that it is

"... not at all clear that a detailed written analysis of the proposed LLNL [Lawrence Livermore National Laboratory] Property Management Policy Manual was performed as a basis for approval by the SAN [San Francisco Operations Office] Manager in order to ensure compliance with the DEAR [DOE acquisition regulations], FPMR [federal property management regulations] and DOE-PMRs [DOE-property management regulations]."

[5]In our April 1991 exit conference with Operations Office officials, they told us that they plan to expand the policy manual into a policy/procedures manual. Then, they plan to test the adequacy of the policies/procedures over a 6-month period. This test will be followed by a personal property management review at the laboratory, and final system approval will be predicated on the outcome of this review.

In our report, we recommended that such a comparison/analysis be made. Specifically, we recommended that DOE identify areas, including internal control weaknesses, in the laboratory's current property management system that do not provide the same level of protection for government-owned property as that which is provided by federal and departmental regulations. Following identification of these weaknesses, we recommended that the San Francisco Operations Office should, as required by regulation, advise the laboratory of the deficiencies that need to be corrected and establish an agreed-upon time frame for mutually resolving and completing the corrective actions.

While DOE agreed with our recommendations, the action being taken to address our concerns is not adequate. In response to the recommendations, DOE made the following comments:

"Reviews conducted by SAN [the San Francisco Operations Office], the DOE Inspector General, and the GAO, as detailed in the subject report have all identified weaknesses in LLNL's [the Lawrence Livermore National Laboratory's] current property management system which are inconsistent with the levels of control required by Federal and Departmental regulations . . . . The Laboratory was directed to review all open findings, develop appropriate milestones, and implement related recommendations . . . . The sufficiency of all LLNL corrective actions will be subject to final review and approval by SAN."

Although taking corrective action for previously identified deficiencies is a positive step, such action does not ensure consistency with federal and departmental property management regulations and sound business practices. A comparison between the draft policy manual and federal and departmental regulatory requirements would identify such inconsistencies. This comparison/analysis has yet to be made.

Conclusions

Although progress has been made in some areas, the property control problems that we identified at the Lawrence Livermore National Laboratory continue as problems today—a substantial amount of government-owned property is missing; the laboratory does not have adequate controls to ensure that property in its custody is safeguarded against theft, unauthorized use, or loss; and DOE has not provided adequate oversight of the laboratory's property management system. As noted, the laboratory's claim that it has found most of the missing equipment is erroneous. In fact, almost all of the equipment that we reported as missing a year ago is still missing. In essence, by changing the basis used to calculate the amount of equipment missing, the laboratory "eliminated" an accountability problem. Such action is not conducive to ensuring that

sound property management practices are in place and raises concerns about the laboratory's ability to properly manage government-owned equipment in its custody.

Also of concern is the fact that, overall, property controls have been weakened since our earlier audit. While it is true that there is no federally or departmentally established threshold for controlling government-owned equipment acquired at a cost below $5,000, GAO's Standards for Internal Controls in the Federal Government clearly states that adequate internal controls are needed to ensure that assets are properly safeguarded against waste, loss, unauthorized use, and misappropriation. The laboratory has not demonstrated that it can effectively and properly control property. Yet, under its new property policy manual, the Laboratory has eliminated accountability controls over all non-capital equipment—the majority of unaccounted for government-owned equipment in the laboratory's custody.

In addition, the laboratory has not offered a sound basis for its actions. Lack of specific regulatory requirements offers little comfort as a reason for eliminating accountability over non-capital equipment items, particularly since, historically, this is the category with the most missing items. And, before the argument can be made that it is not cost-effective to control non-capital equipment at the laboratory, such an argument would have to be supported with documentation. This has not been done.

Of greatest concern, however, is the fact that DOE's oversight of the laboratory continues to be inadequate. The San Francisco Operations Office approved the new property management policy manual without ensuring that the controls over government-owned property in the laboratory's custody would be provided the same level of protection as that provided for under federal and departmental regulations. As noted in our earlier report, DOE's role is more than that of a policy maker and a provider of direction—the Department is ultimately responsible for ensuring that government-owned property is adequately safeguarded and protected. In the case of the Lawrence Livermore National Laboratory, DOE continues to fall short of meeting this responsibility.

Recommendations

To ensure full compliance with the recommendation in our April 1990 report, we recommend that the Secretary of Energy direct the San Francisco Operations Office Manager to perform a detailed written analysis of the laboratory's property management policies and compare the

levels of control provided by them with the levels of control inherent in federal and departmental property management regulations. This analysis should then be used as a basis for making changes to the laboratory's proposed property management system, consistent with the federal and departmental requirements.

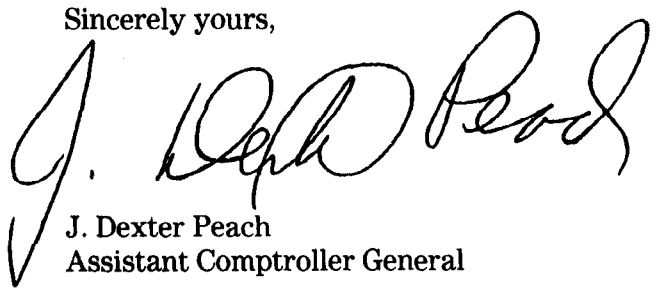
We also recommend that the Secretary of Energy direct the San Francisco Operations Office Manager to demonstrate, through a risk assessment and cost/benefit analysis, the appropriateness of eliminating accountability controls over the non-capital equipment previously accounted for in the laboratory's property management data base. To the extent that this analysis identifies non-capital equipment that should be accounted for and controlled, then the Operations Office should work with the laboratory to ensure proper accountability, such as setting an appropriate dollar threshold and adding the appropriate items to the laboratory's property management data base.

We performed our work at DOE headquarters, DOE's San Francisco Operations Office, and the Lawrence Livermore National Laboratory between August 1990 and February 1991, with updates through April. Additional information on the scope and methodology of our review is contained in appendix I.

As agreed with your office, we did not obtain official agency comments on a draft of this report. We did, however, discuss the facts with responsible DOE and laboratory officials and incorporated their suggestions where appropriate. In general, they agreed with the facts presented. As arranged with your office, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Secretary of Energy; the Director, Office of Management and Budget;

and other interested parties. This work was performed under the direction of Victor S. Rezendes, Director, Energy Issues, who can be reached at (202) 275-1441. Major contributors to this report are listed in appendix II.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Objectives, Scope, and Methodology

In August 1990, the Chairman of the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, asked us to determine the accuracy of the laboratory's claims that most of the equipment we had reported as missing had been found and that our figures misrepresented the laboratory's inventory. As agreed, we determined whether controls over government-owned property at the laboratory have been strengthened following our April report. In addition, we examined the adequacy of DOE's oversight with respect to the changes made in laboratory property controls.

We performed our work from August 1990 to February 1991, with updates through April 1991. Work was performed at DOE headquarters, the DOE San Francisco Operations Office located in Oakland, California, and the Lawrence Livermore National Laboratory located in Livermore, California. This work was done in accordance with generally accepted government auditing standards.

To determine the accuracy of the laboratory's claims regarding the GAO reported missing equipment statistics, we analyzed and discussed with DOE and laboratory officials the methodology and data the laboratory used to support its claims.

To determine the responsibilities of DOE and the laboratory with respect to property controls, we reviewed the contract between DOE and the University of California. We also reviewed applicable federal and departmental property management regulations.

To determine whether laboratory property management changes have strengthened property controls, we reviewed and discussed with DOE and laboratory officials the laboratory's actions taken in response to our April 1990 report. We also reviewed the property management policies and procedures developed by the laboratory since our April 1990 report.

To identify what actions DOE has taken, or plans to take, to ensure that the laboratory improves its property management system, we reviewed and discussed with DOE officials their property management oversight responsibilities and activities, including, but not limited to, (1) property management guidance they provided to the laboratory and (2) their analysis and comments on the laboratory's property management policies and procedures.

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