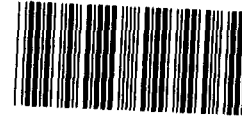




Testimony



143415

*For Release
on Delivery
Expected at
9:30 a.m. EST
Tuesday
March 19, 1991*

**Better DOE Controls Needed Over
Contractors' Discretionary R&D Funds**

Statement of
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Resources, Community, and Economic
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Before the
Environment, Energy, and Natural
Resources Subcommittee
Committee on Government Operations
House of Representatives



Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to discuss our review of the Department of Energy's (DOE) management oversight of its laboratories' discretionary research and development (R&D) activities. These activities cost over \$120 million in fiscal year 1989 and costs are expected to increase significantly in the future. My testimony today is based, in part, on our December 1990 report¹ and the results of our Office of Special Investigations' (OSI) examination, that you requested, of an inappropriate use of discretionary R&D funds by the Los Alamos National Laboratory.

In summary, our report noted that both DOE and laboratory officials support the need for some discretion on the part of laboratory directors in choosing R&D projects. However, our report also points out serious weaknesses in DOE's oversight of discretionary R&D funds including unclear and incomplete guidance and management controls that were not implemented. Further, there was no DOE guidance specifically applicable to a large component of Los Alamos' discretionary R&D program, a component funded at about \$48 million annually. Finally, we found that, despite DOE's plans to increase the allowable level of funding for its laboratories' discretionary R&D activities, DOE has not assessed the costs and

¹Energy Management: Better DOE Controls Needed Over Contractors' Discretionary R&D Funds (GAO/RCED-91-18).

benefits of the discretionary R&D activities it had previously authorized. While our review was limited to the discretionary R&D activities of three of DOE's nine multiprogram laboratories-- Lawrence Livermore, Sandia, and Los Alamos National Laboratories-- some of our findings may also be applicable to discretionary R&D activities at other laboratories.

On February 28, 1991, DOE issued revised guidance for the laboratories' discretionary R&D activities which addresses some of the concerns contained in our December 1990 report and in an earlier report by the DOE Office of Inspector General (IG). However, we found that the guidance still contains some ambiguous language on appropriate and inappropriate uses of discretionary R&D funds. Further, while the revised guidance modifies and reiterates oversight responsibilities, past experience has shown that written procedures alone may not be sufficient to ensure effective oversight. DOE needs to effectively implement the policy guidance as well as assess the benefits resulting from the discretionary activities it authorizes. DOE's revised guidance is not clear on how program benefits will be assessed.

Our Office of Special Investigations' review of a reimbursable cost contract between DOE and a private company--Mesa Diagnostics, Inc.--found that the contract resulted in a cost overrun of \$1.8 million. DOE subsequently obtained reimbursement for \$300,000 of the cost overrun. Los Alamos, with DOE's

knowledge, inappropriately created a discretionary R&D project and charged the remaining \$1.5 million in costs to it.

LABORATORIES' DISCRETIONARY

R&D PROGRAMS

Section 303 of Public Law 95-39, the Energy Research and Development Administration fiscal year 1977 authorization act, gives DOE authority to approve the use of a reasonable amount of laboratory funds to conduct employee-suggested R&D activities selected at the discretion of the laboratory directors.

In December 1983, DOE established, by internal order, the Exploratory Research and Development Program (Exploratory R&D). The order on Exploratory R&D was revised in 1986 and established policies and procedures governing the program, including criteria for determining appropriate and inappropriate uses of funds, as well as oversight responsibilities. DOE again revised and reissued the order on February 28, 1991. The most recent order renamed the activity "Laboratory Directed R&D."

Two of the three laboratories we reviewed (Sandia and Los Alamos) conducted some discretionary R&D activities before the formal establishment of the Exploratory R&D program in 1983. In implementing the program, Sandia substituted Exploratory R&D for its existing discretionary R&D efforts, Lawrence Livermore created

an Exploratory R&D program, and Los Alamos incorporated Exploratory R&D as a component of its existing discretionary R&D program. Los Alamos' discretionary R&D program, until the beginning of FY 1991, consisted of two components: Basic Research and Exploratory R&D.

Prior to the completion of our report, the DOE Office of the Inspector General also reviewed the discretionary R&D activities at Sandia, Los Alamos, and Lawrence Livermore, as well as other DOE laboratories. Its reviews also found some problems with the DOE oversight of discretionary R&D. For example, the IG found that DOE had not been reviewing discretionary R&D projects at some laboratories.

DOE GUIDANCE WAS UNCLEAR
AND INCOMPLETE

Our December 1990 report noted that the guidance in the 1986 DOE order on Exploratory R&D was not clear enough to ensure that laboratories use these funds appropriately. When we examined the laboratories' discretionary R&D activities against our reading of the criteria, we concluded that the laboratories had spent funds on questionable activities. For example, the DOE order prohibited the purchase of general purpose capital equipment, but it neither defined "general purpose" nor specified the types of equipment that could be purchased with these funds. Further, the order did not incorporate the requirement of Public Law 95-39 that project

reports be filed with DOE's Office of Scientific and Technical Information in Oak Ridge, Tennessee, at the completion of each project. As a result, Los Alamos and Sandia were not complying with this requirement. Disseminating the results of basic scientific research, whether successful or not, is important if that research is to be of value to other researchers and can prevent duplication of R&D efforts and wasted costs.

OVERSIGHT REQUIREMENTS WERE NOT
IMPLEMENTED OR DID NOT EXIST

DOE lacked effective controls over laboratories' discretionary funds. Weaknesses we observed include the following: (1) DOE headquarters did not conduct the annual program oversight reviews required in the order, (2) the Albuquerque Operations Office did not review the nature of Exploratory R&D projects, and (3) DOE provided virtually no oversight of the Basic Research component of Los Alamos' discretionary R&D program.

DOE's Office of the Assistant Secretary for Defense Programs, the office responsible for overseeing the utilization of Exploratory R&D funds at the three laboratories we reviewed, did not regularly conduct the required annual on-site reviews. According to DOE, these reviews were intended to be the primary headquarters oversight mechanism. However, since December 1983, DOE has conducted only two of these reviews at the three

laboratories we reviewed. Defense Program officials told us that the reviews have often been deferred because of other higher priority issues within the Office of Defense Programs. They also cited management turnover within the Office as a major reason for not conducting the reviews.

DOE's Albuquerque Operations Office had done little to oversee Exploratory R&D activities at Los Alamos and Sandia. The DOE order required that the manager of the responsible operations office review the nature of Exploratory R&D expenditures and report those findings to the Assistant Secretary for Defense Programs. However, it appears that the DOE Albuquerque Operations Office's reviews of Exploratory R&D expenditures at Los Alamos and Sandia were, until recently, limited to determining whether Exploratory R&D expenditures at the laboratories exceeded the funding ceiling for such activities. The Albuquerque official responsible for reviewing the laboratories' discretionary R&D activities told us that, in his opinion, DOE headquarters was responsible for reviewing the actual use of funds during the annual on-site review. Nevertheless, DOE's Albuquerque office reported that the programs were being conducted in accordance with the 1986 DOE order even though it apparently did not conduct project-specific reviews of fiscal years 1986 and 1987 projects.

DOE's San Francisco Operations Office has provided somewhat greater oversight of the discretionary R&D activities at Lawrence

Livermore by reviewing a draft of the laboratory's annual report on its Exploratory R&D activities. However, Defense Programs officials do not believe that this has been an especially critical review and thus do not consider it to have been adequate oversight.

Further, DOE had no guidance on how funds from the Basic Research component of Los Alamos' discretionary R&D program could be used and performed virtually no oversight of the program. The program accounted for about \$48 million of Los Alamos' \$66 million in discretionary R&D expenditures in FY 1988.

We found that Los Alamos used some funds for activities that were inconsistent with Public Law 95-39 because they did not involve actual research. Even more significantly, Los Alamos, with DOE's knowledge, used over \$2.6 million of the Basic Research funds to pay uncollected costs for three reimbursable projects done at the laboratory. I will next discuss one case which accounted for over half of this amount.

MESA DIAGNOSTICS--A CASE STUDY

As a part of your request, GAO's Office of Special Investigations investigated the circumstances of a \$1.8-million cost overrun by the Mesa project performed at the Los Alamos National Laboratory from January 1985 to February 1986. The

project, performed for Mesa Diagnostics, Inc., resulted in DOE's inappropriate use of \$1.5 million from the Basic Research component of Los Alamos' discretionary R&D program.

In late December 1984, Mesa and DOE's Albuquerque Operations Office entered into a reimbursable contract for work to be performed at Los Alamos. Under the terms of the contract, Mesa agreed to pay DOE \$4.3 million for Los Alamos' technical assistance in designing a device to measure characteristics of viruses and bacteria. Mesa advanced \$1.2 million immediately. The contract required DOE to notify Mesa in writing when 90 percent of this had been expended and to request another payment. If Mesa did not pay, DOE was to instruct Los Alamos to discontinue the project.

Heavy investments in buildings and equipment expended the advance funds quickly--sometime between March and July 1985. But DOE did not bill Mesa for additional funds, and the project continued. On February 14, 1986, the DOE's Albuquerque office billed Mesa for a cost overrun of approximately \$1.8 million.

According to Mesa officials, before Mesa received the bill, it cancelled the contract on February 20, 1986, alleging misrepresentation, nonperformance, and fraud on the part of Los Alamos and its scientists. DOE's Albuquerque office--instead of reporting the allegations to the DOE Inspector General or

Headquarters, as required by DOE Order 2320.1A--viewed them as a negotiating tactic by Mesa.

In August 1986, officials from DOE's Albuquerque office and Los Alamos met to discuss a possible course of action in the event of Mesa's nonpayment. According to the Deputy Director in charge of the laboratory's discretionary R&D program, the officials concluded that discretionary R&D funds could be used to cover the cost overrun--even though the use would violate internal procedures by charging for work that had been completed. The officials reasoned that the Mesa project might have qualified for discretionary R&D funding had it gone through that funding process.

In November 1986, Mesa offered to pay DOE an additional \$300,000, bringing its payments to \$1.5 million--half of the project costs. DOE's Albuquerque office agreed but did not have funds for its half. It then advised Los Alamos to charge DOE's costs to the Los Alamos discretionary R&D account, as had been decided at the August meeting. Los Alamos subsequently created a Basic Research project within its discretionary R&D program and charged the \$1.5 million to that project in violation of Los Alamos procedures.

We discussed our review of the Mesa case with the DOE-IG in February 1991 and the IG is continuing to investigate DOE's

handling of the case. A more detailed discussion on the results of our investigation is contained in attachment I to this statement.

DOE EFFORTS TO IMPROVE OVERSIGHT

ADDRESSES SOME BUT NOT ALL PROBLEMS

DOE has recently taken action to address problems identified by GAO and by DOE's IG. In response to a May 1989 DOE-IG report on Los Alamos' discretionary R&D program, DOE's Office of Defense Programs formed a group to study the discretionary R&D activities at the weapons laboratories--including the three laboratories reviewed by GAO. This study identified many of the same problems identified by GAO and the DOE-IG.

As a result of the Defense Programs study, DOE revised its guidance, which, if effectively implemented, addresses some of the concerns and recommendations raised in our report. However, other concerns exist.

The revised guidance addresses some of our report's recommendations by (1) covering all discretionary R&D activities carried out by the laboratories, including Los Alamos' Basic Research program, (2) revising the criteria on appropriate and inappropriate uses of discretionary R&D funds, and (3) clarifying the oversight responsibilities of DOE headquarters and field offices. However, we are concerned that some of the new criteria

on how discretionary R&D funds may be used are also vague. For example, the prior guidance stated that appropriate R&D included, but was not limited to, "relatively small projects." The new guidance states that projects should be "normally relatively small." The new order also does not establish guidance on the appropriate duration of projects. Rather, the revised guidance requires only that the laboratories establish guidance on the appropriate length of projects and that DOE approve all exceptions to the limit set.

We have continuing concerns about how the new guidance will be carried out and that DOE has not formally assessed the benefit of the discretionary R&D programs. While the revised DOE guidance modifies and reiterates oversight responsibilities, past experience has shown that written oversight requirements alone are not sufficient to ensure effective oversight. As our report pointed out, DOE did not always adhere to its requirements and the reviews that were performed were of varying quality.

We are concerned that this situation may continue. For example, while the Albuquerque office took some steps to improve its oversight of the Los Alamos' discretionary R&D activities in FY 1988, its review of Sandia's FY 1988 discretionary R&D activities was limited to an informal discussion with Sandia officials. In our view, such an evaluation is insufficient to assess Sandia's

compliance with the requirements in DOE's guidance for the program.

Another concern is that DOE has not assessed the extent to which the multiprogram laboratories' discretionary R&D activities have benefited DOE programs and the comprehensiveness of the discretionary R&D program reviews provided for in the revised guidance is not clear.² In June 1988, DOE's Office of Energy Research did evaluate the Exploratory R&D programs of the five multiprogram laboratories it oversees. However, the study focused on the structure and procedures of the programs carried out at the laboratories, rather than on the resultant benefits of the projects to DOE's programmatic activities and plans. According to the study, "the ultimate measure of the Exploratory R&D program's success lies not in an analysis of its structure and procedures, but in an assessment of outcomes and impacts." However, the study noted that such an assessment was beyond its scope. In 1989 DOE's Office of Defense Programs also reviewed the defense laboratories' discretionary R&D programs, but that study also focused on procedures and program structure.

Since the issuance of the DOE order on Exploratory R&D in December 1983 through FY 1988, DOE has generally limited such

²Both DOE headquarters and the DOE operations offices have carried out some reviews of Exploratory R&D activities. However, these reviews have not assessed the relative costs and benefits of the activities.

expenditures to an amount equal to about 2 percent of the laboratories' operating budgets, although Los Alamos has spent an additional 5 to 6 percent of its operating budget on discretionary R&D through the Basic Research component of its program. However, DOE's February 1991 guidance would set a 6 percent ceiling on discretionary R&D. Further, the previous funding ceiling generally applied by DOE was an amount equal to 2 percent of the laboratories' operating budgets. The 6-percent ceiling would apply to a larger base in that both operating and capital equipment funds are included. Accordingly, this represents a potentially significant increase in discretionary R&D funding for most DOE laboratories.

The new DOE guidance states that the level of funding that each laboratory will be allowed to spend will be based on several factors, including a plan submitted by the laboratory director to the cognizant DOE secretarial officer, the results of the most recent review of the laboratory's discretionary R&D program, and the most recent annual laboratory appraisal. While we support this attempt to tie discretionary R&D funding to past and expected future benefits of the program, it is not clear that the plans and reviews called for in the order will provide the information DOE needs to assess program benefits. For example, the plans to be submitted by the laboratories are required to contain only a general description and justification of the laboratory's program and its benefits.

CONCLUSIONS

DOE has acknowledged management control weaknesses relating to discretionary R&D and has recently taken some corrective actions. However, we continue to be concerned about whether the issuance of new written requirements will be sufficient to ensure effective oversight. The Mesa case illustrates the temptation facing DOE and laboratory officials to bypass standard procedures when faced with an unexpected and embarrassing expense and instead utilize uncontrolled discretionary funds. Further, DOE has not carried out any formal assessments of the benefits accruing to its programs as a result of the discretionary R&D activities it has allowed its laboratories to carry out. Such assessments are needed, in our view, if DOE is to have a defensible basis for significantly increasing the level of funding it approves for this activity.

Our December 1990 report contained a recommendation that the Secretary of Energy periodically assess the relative benefits and costs of past discretionary R&D activities and consider the results of this examination in setting future discretionary R&D funding levels. While DOE's revised guidance does require that the cognizant assistant secretary consider the results of a laboratory's discretionary R&D program when recommending future funding ceilings, it is unclear whether this review will be

thorough or formal enough to satisfy our recommendation. Finally, while the revised DOE guidance on discretionary R&D addresses some of our specific recommendations to improve DOE oversight of these activities, the Secretary needs to stress to DOE management the importance of ensuring that DOE conducts the oversight called for in the guidance.

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Mr. Chairman, this concludes my prepared statement. We would be pleased to respond to any questions you or members of the Subcommittee may have.

CASE STUDY OF THE MESA PROJECT

As part of a request by the Chairman, Environment, Energy, and Natural Resources Subcommittee, House Committee on Government Operations, concerning DOE contractors' discretionary R&D funds, GAO's Office of Special Investigations investigated the circumstances of a \$1.8-million cost overrun for the Mesa project at the Los Alamos National Laboratory. That project, initiated under a reimbursable cost contract, resulted in a cost overrun and led to DOE's inappropriate use of \$1.5 million from the Basic Research component of Los Alamos' program for discretionary research and development (R&D).

THE MESA PROJECT

In 1980, Congress passed the Stevenson-Wydler Technology Innovation Act in an effort to commercialize technology developed at federal laboratories. To encourage full participation by domestic industries, Congress in 1981 adopted tax credits for certain R&D spending. As a result, capital investment groups were formed throughout the United States.

In 1983, a capital investment fund known as the Santa Fe Private Equity Fund (Fund) agreed to sponsor a project by two Los Alamos scientists that proposed to identify viruses and bacteria

through physics, as opposed to microbiology. The Fund obtained additional financial backing from the PruTech Research and Development Partnership (PruTech) established by Prudential Bache to fund R&D projects. The Fund's manager, together with PruTech's representative, then created what became Mesa Diagnostics, Inc. (Mesa), the corporate entity responsible for developing and selling the diagnostic instrumentation systems expected to result from the Los Alamos project.

Contract negotiations between Mesa and DOE's Albuquerque Operations Office, which has oversight of activities at Los Alamos, extended from October 1983 through 1984. On December 21, 1984, Mesa and DOE's Albuquerque office signed a reimbursable contract for work to be performed at Los Alamos. Under the terms of the contract, or "funds-in agreement," Mesa agreed to pay DOE's Albuquerque office \$4.3 million for technical assistance in the design of a multiparameter light-scattering flow cytometer--a device to measure multiple characteristics of cells--for use in the identification of viruses and bacteria. Mesa reserved the right to terminate the contract if Los Alamos was unable to build a flow cytometer to identify viruses, the initial focus of the project.

DOE's Albuquerque office agreed to waive compensation for depreciation and added factor costs since Los Alamos scientists

would derive professional experience and possible recognition from the work being performed. Also, the contract allowed the government to take title to the buildings constructed and equipment purchased for the project, thus benefitting DOE.

In the contract, Mesa agreed to submit an advance payment on the project. The contract also required DOE's Albuquerque Operations Office to notify Mesa "in writing" when 90 percent of the advance money had been expended, so that an additional payment could be made. The Albuquerque office would determine the amount of the additional payment at the time of billing. In the event Mesa failed to make the additional payment, DOE's Albuquerque office would instruct Los Alamos to discontinue work on the project.

DOE'S ALLEGED BREACH OF CONTRACT AND THE RESULTING COST OVERRUN

The Mesa project, which began in January 1985, was expected to be completed in 24 months. According to the lead scientist, the money advanced by Mesa under DOE's initial billing was spent by March 1985, because of heavy up-front costs for buildings and equipment. Los Alamos financial reports, according to a DOE auditor, document that the advance was fully spent by June 1985.

Despite the lack of funding and in disregard of the terms of the contract, officials of DOE's Albuquerque office and Los Alamos allowed work to continue on the Mesa project. Los Alamos officials contended to us that the Contracts and Finance Divisions at DOE's Albuquerque Operations Office were telephonically advised that the money had been expended and that an additional advance was needed. A DOE Finance official claimed he was told by Mesa's finance officer that the funds had been depleted, that he advised the Contracts Division at DOE's Albuquerque office, but that he was not authorized to bill Mesa until months later. The DOE contract official responsible for authorizing the billing at DOE's Albuquerque office claimed he did not recall being told that Los Alamos had depleted the funds and could not explain DOE's failure to bill Mesa. Mesa officials admitted they were aware of Los Alamos' continued research but did not submit additional funds because DOE's Albuquerque office had not billed Mesa.

At the request of DOE's Albuquerque office, Los Alamos sent written confirmation of the cost overrun to the Albuquerque office on February 5, 1986. The Albuquerque office then submitted a bill to Mesa for \$1,721,600 on February 14, 1986.¹ According to the contract termination letter, Mesa cancelled the contract on

¹Close-out costs eventually raised the amount due to \$1,860,100 in April 1986, but this was lowered to \$1,800,502 in July 1986.

February 20, 1986. However, according to Mesa's accountant, Mesa cancelled the contract before it received the bill.

MESA'S ALLEGATIONS OF DOE/LOS ALAMOS
MISREPRESENTATION, NONPERFORMANCE, AND FRAUD

DOE files reveal that at the time of the contract termination, Mesa officials alleged misrepresentation, nonperformance, and fraud by Los Alamos and its scientists. Mesa officials contended that the technology was not as it had been represented at the outset of the project--namely that the technology could not measure viruses and instead measured the egg albumen base of the experiment. They alleged that work on the project had not been satisfactory--deadlines were allegedly not met and milestones were missed. Finally, they alleged fraud, in that work on other projects appeared to have been billed to Mesa. A Mesa official also alleged that the project's lead scientist had engaged in patent fraud associated with the flow cytometer.

Officials at Los Alamos and DOE's Albuquerque Operations Office acknowledged that Mesa had made these charges during discussions on the contract termination. However, none of the officials interviewed reported the allegations to DOE's Inspector General for investigation as required by DOE Order 2320.1A (Apr. 2, 1985). Attorneys for DOE's Albuquerque office dismissed Mesa's allegations as "posturing" to negotiate a better settlement but

admitted they had made no effort to confirm or refute the allegations. The Contracts Division Director at DOE's Albuquerque office suggested that the allegations must have been without merit because Mesa did not pursue fraud charges by filing a civil fraud suit. In his reply to us, a Mesa official countered that the company was continuing to seek investors at that time and did not want to engage in prolonged litigation.

The Los Alamos Program Director, who reviewed the project after its termination, also told us that the allegations had no merit, explaining that no one at Mesa had the technical ability to assess the work being done by Los Alamos and that Mesa officials' allegations regarding patent fraud were unfounded, demonstrating a lack of understanding of the patent process. During an interview with us, Mesa officials disputed the Director's opinion of Mesa's technical ability. They noted that, in August or September 1985, the company had hired a physicist familiar with flow cytometry as a technical consultant.

Los Alamos officials, who disregarded Mesa's allegations on the basis of the Program Director's review, maintained that Mesa never expressed dissatisfaction while the work was being performed at the laboratory. However, DOE and Mesa files reveal that in September 1985, Mesa began expressing frustration over delays in the project. According to one Mesa official, Mesa's management

discussed terminating the contract with a Los Alamos official in late 1985; but instead, Mesa's Board of Directors replaced its upper management, and the project was allowed to continue for several more months.

Our investigation further revealed that by the summer of 1985, the lead scientist had concluded that he could not identify viruses using the instrument developed for Mesa--possible grounds for termination of the contract by Mesa. Although the scientist claims he then refocused his efforts on identifying bacteria, the files indicate that the inability to identify viruses and the need to refocus on bacteria were not discussed with Mesa until several months later, in November of 1985. The files also indicate that the inability to identify viruses was one of Mesa's reasons for terminating the agreement in February 1986. We were advised that the Mesa project was the largest project at Los Alamos' Life Sciences Division during this time and that termination of the Mesa contract would have resulted in layoffs of several Los Alamos scientists.

SETTLEMENT NEGOTIATIONS AND USE OF
LOS ALAMOS' DISCRETIONARY FUND

Officials of DOE's Albuquerque Operations Office negotiated with Mesa from February to July 1986 to settle close-out costs following Mesa's termination of the contract. Total costs of the

Mesa project amounted to approximately \$3 million, of which Mesa had already paid \$1.2 million. In July 1986, DOE's Albuquerque Operations Office sent a demand letter to Mesa with an attached revised final invoice for the balance owed--approximately \$1.8 million.

Officials of DOE's Albuquerque office and Los Alamos met on August 5, 1986, to discuss a possible course of action in the event of nonpayment by Mesa. According to the Los Alamos Deputy Director in charge of the laboratory's discretionary R&D program, a suggestion was made to bill the Mesa deficit to the indirect account at Los Alamos; but he objected to this proposal because it was "inappropriate" to use the indirect account to fund basic research. The Deputy Director then suggested that the costs could be charged to the discretionary R&D account if the work had not been compensated by Mesa and was "good research," although charging project costs after the work had been performed would violate Los Alamos' internal procedures. The officials decided that, if necessary, the discretionary R&D fund could be used to cover the cost overrun despite Los Alamos' internal procedures to the contrary. They reasoned that the Mesa project would likely have been funded through the discretionary R&D program and such funding would not be perceived as a "write-off."

In November 1986, Mesa offered to pay an additional \$300,000, bringing its total share to \$1.5 million--half of the total project costs. DOE's Albuquerque office agreed to split the costs of the project but had no way to account for the additional expenditure of \$1.5 million. The Albuquerque office then advised Los Alamos to charge the costs to the discretionary R&D fund, as had previously been decided at the August 5 meeting. Los Alamos subsequently created a discretionary R&D account, which it justified on the basis of related, ongoing projects at Los Alamos; and the \$1.5 million was charged to that account.

When asked why DOE's Albuquerque office negotiated a settlement with Mesa rather than process the cost overrun as a claim under the Federal Claims Collection Standards (4 C.F.R. parts 101 to 105), several DOE officials noted their concerns that Mesa, which they believed had experienced some financial problems, did not have sufficient funds and might go bankrupt if forced to pay the full amount. According to Mesa's accountant, prior to his resignation from Mesa in April 1986, money sufficient to cover the contract's cost had been transferred, in anticipation of payment, from Mesa's escrow accounts in New York to its local account in New Mexico.

DOE attorneys also noted it was unlikely that DOE would prevail in an attempt to obtain full payment since DOE may have

breached the contract by failing to bill Mesa when the advanced funds were depleted. In addition, they admitted they did not like the idea of the laboratory's receiving negative publicity.

Mesa's scientists continued working on the flow cytometer and eventually designed an instrument capable of identifying bacteria. The company then discovered that no market existed for the machine. In 1990, the company liquidated its assets and ceased doing business. The instrument is currently being studied for possible use by a Swiss company.

METHODOLOGY

Between May 21 and September 14, 1990, and in December 1990, OSI interviewed the Los Alamos scientists involved with the Mesa project; officials of Los Alamos, DOE's Albuquerque Operations Office, and Mesa involved in contract negotiations; and officials of Los Alamos, DOE's Albuquerque Operations Office, and Mesa involved in the Mesa settlement. In addition, we met with the GAO and DOE Inspector General (IG) staffs that conducted related audits at DOE and with officials of the DOE-IG Investigations Division that is performing a related investigation. We also reviewed files from DOE's Albuquerque Operations Office, Los Alamos, and Mesa regarding the project and corporate records.