GAO

United States General Accounting Office

Report to the Chairman, Subcommittee on Environment, Energy, and Natural Resources, Committee on Government Operations, House of Representatives

December 1987

NUCLEAR SECURITY

DOE Needs a More Accurate and Efficient Security Clearance Program





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

Resources, Community, and Economic Development Division

B-229078

December 29, 1987

The Honorable Mike Synar Chairman, Subcommittee on Environment, Energy, and Natural Resources Committee on Government Operations House of Representatives

Dear Mr. Chairman:

On November 1, 1985, you requested that we review the Department of Energy's (DOE) personnel security clearance program. We subsequently agreed with your office to respond in two reports. In our first report on March 10, 1987, entitled <u>Nuclear Security: DOE's Reinvestigation of Employees Has Not Been Timely</u>, we presented our analysis of DOE's program for reinvestigating cleared employees. This second report presents our analysis of other aspects of DOE's clearance and security programs including (1) the timeliness of DOE's process for granting, suspending, and revoking clearances; (2) factors that affect the clearance work load, and (3) the accuracy of DOE's clearance data bases.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days from the date of this letter. At that time, we will send copies to the appropriate congressional committees; the Secretary of Energy; and the Director, Office of Management and Budget. We will also make copies available to others upon request.

This work was performed under the direction of Keith O. Fultz, Associate Director. Other major contributors are listed in appendix III.

Sincerely yours,

J. Dexter Peach

Assistant Comptroller General

Executive Summary

Purpose

The Department of Energy (DOE) operates many sensitive national security programs, including the nuclear weapons program. DOE requires most of its federal and contractor employees to undergo personnel security investigations and obtain security clearances to ensure that those with access to sensitive information and material are trustworthy.

On November 1, 1985, the Chairman, Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations, requested that GAO review DOE's personnel security clearance program. On March 10, 1987, we reported on one aspect of DOE's clearance program—the requirement for reinvestigating at 5-year intervals the backgrounds of cleared employees. This report focuses on

- the timeliness of DOE's program for granting, suspending, and revoking clearances;
- · factors that affect the clearance work load; and
- the accuracy of DOE's clearance data bases.

Background

DOE's Director of Safeguards and Security develops policies, standards, guides, and procedures for its personnel security program. Program implementation is the responsibility of the director at headquarters and of the managers at 8 field offices which oversee the activities of contractors at 27 doe-owned facilities. The Office of Personnel Management (OPM) performs most of the investigations of applicants for doe clearances.

DOE and contractor employees hold about 220,000 clearances at 5 clearance levels. GAO reviewed the clearance programs at headquarters and at the Albuquerque, New Mexico; Oak Ridge, Tennessee; and Richland, Washington, field offices. Together these offices account for 55 percent of DOE's clearances and are responsible for a broad range of DOE's classified military and civilian nuclear programs. We reviewed the clearance programs of seven contractors managed by these field offices because they provided a broad mix of DOE facilities and had a large number of high-level clearances.

Results in Brief

DOE's process for granting or terminating personnel security clearances is lengthy. For example, the time required to obtain a clearance when no background problems are identified with an applicant is about twice as long as OPM and DOE targets suggest it should take—almost 6 months

compared to about 3 months. The lengthy process increases costs, lowers productivity, and raises security concerns. According to DOE security officials, the clearance process is lengthy because security staffs have inadequate resources and OPM takes a long time to perform its investigations.

In addition, contractors and DOE are not fully complying with requirements that could accelerate processing by reducing the clearance work load. Contractors are not fully using pre-employment investigations to screen out unsuitable employees before they are hired and submitted for a clearance, and are not aggressively reducing the numbers and levels of clearances to comply with regulations.

Furthermore, DOE has not maintained accurate clearance data bases, which it needs to effectively manage its clearance program. Clearance files at headquarters and at the field offices contained over 4,600 clearances that should have been terminated, and in over 600 other cases employees had clearance badges but did not have active clearances listed on the clearance files. In addition, clearance files contain data errors such as incorrect clearance levels and holder names and are missing important data such as social security numbers. DOE has begun correcting these problems.

Principal Findings

Timeliness of Clearance Actions

DOE takes longer than GAO believes it should take to grant or terminate personnel security clearances. For example, to grant or deny a new clearance, DOE has taken as long as 12 months when questions of trustworthiness were evaluated and resolved without a hearing. Furthermore, DOE takes 13 to 17 months to continue or suspend a clearance and an average of 18 months to eventually revoke a clearance when DOE obtains information that raises substantial questions about a clearance holder's trustworthiness. The long processing time lowers productivity, increases costs, and poses a security concern. Clearance decisions could be hastened if OPM reduced its average processing time from about 6 months to its target time of 75 days and if the offices we visited met their processing times. To reduce its processing time OPM is attempting to increase its investigations staff from 402 to 599 but was still 100 short on September 1, 1987. Further, clearance decisions take longer than they should because DOE's clearance staffs, which lack resources and

milestones for completing some clearance steps, take too long to analyze and process data, according to DOE security officials.

Steps to Reduce Clearance Work Load

The impact of resource shortages on the clearance branch's ability to process clearances on time is exacerbated because contractors and DOE have not fully implemented steps to reduce the clearance work load. For example, six of the seven contractors covered in our review were not obtaining important pre-employment information on job applicants before they were hired and submitted for a clearance. One contractor did not do personal reference checks, another did not verify education or do reference checks, and a third did not do credit checks. Such pre-liminary information helps to identify, before they become employed, job applicants who may be unsuitable for employment and ineligible for a clearance.

In addition, DOE security officials believe the clearance workload is larger than it needs to be because people who do not require clearances have them and others have higher clearances than they need. For example, a May 4, 1987, DOE Inspector General report pointed out that 83 percent of the 1,100 employees in 8 headquarters organizations it examined had higher level clearances than needed. While DOE and its contractors have recently reduced the level of or terminated clearances—for example, Oak Ridge reduced almost 1,700—further reductions can be achieved. On June 9, 1987, DOE headquarters directed the field offices to develop plans for meeting reinvestigation goals. The plans are to include a variety of steps aimed at identifying and reducing excessive clearance levels and numbers.

Control Over Accuracy of Clearance Data Bases

Doe does not maintain accurate data on its 220,000 clearances. For example, Doe's headquarters clearance data base listed as active about 800 of 16,000 clearances for its Richland office and about 3,800 of 51,000 clearances for its Albuquerque office that should have been terminated because the clearance holders were no longer affiliated with Doe. On the other hand, Doe headquarters assessed headquarters clearances and, between September 1984 and April 1987, terminated over 5,400 clearances for people who were no longer affiliated with Doe. These problems exist because new data bases have been created without initially validating the data entered; field offices have not entered new data; contractors, field offices, and headquarters all maintain data bases that poorly communicate with each other; and Doe has not periodically validated the information in these data bases. Doe has begun to correct

Executive Summary

these problems by validating and correcting the information in its data bases and requiring yearly revalidations.

Recommendations

To enhance security, reduce cost, and increase productivity, GAO makes a number of recommendations to the Secretary of Energy to improve (1) DOE's timeliness, thoroughness, and efficiency in granting, suspending, and revoking security clearances and (2) the accuracy and efficiency of DOE's process for controlling those security clearances using its data bases. (See chs. 2, 3, 4, and 6.)

Agency Comments

GAO discussed the facts in this report with DOE and OPM officials and incorporated their comments, as appropriate. As requested, GAO did not ask DOE or OPM to review and comment officially on this report.

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Abbreviations

AR	Administrative Review
CPCI	Central Personnel Clearance Index
DOD	Department of Defense
DOE	Department of Energy
FBI	Federal Bureau of Investigation
GAO	General Accounting Office
ОРМ	Office of Personnel Management
PEI	Pre-employment Investigation
PSQ	personnel security questionnaire

Introduction

The Department of Energy (DOE) operates many programs that involve sensitive national security issues; the nuclear weapons program is one of the most sensitive. Because of the national security implications of its programs, DOE requires most employees—its own and those of its contractors—to undergo personnel security investigations and obtain and maintain security clearances. The security clearance is intended to restrict access to classified information, material, and security areas to (1) those who, through the personnel security investigation process, are found trustworthy and (2) those whose positions require such access. The clearance is one of two requirements that must be met to obtain access. The second is an official need for specific access to perform one's job.

DOE Order 5631.2A, December 1985, sets out the agency's personnel security policy, program, and requirements. DOE's Director of Safeguards and Security develops policies, standards, guides, and procedures to implement the order. DOE's decentralized management structure allows the field office managers flexibility to interpret and implement these orders and regulations. Program implementation is the responsibility of the director at headquarters and of the managers at 8 field offices which oversee the activities of contractors at 27 DOE-owned facilities.

DOE and other federal employees and contractor employees hold about 220,000 clearances. DOE employees hold about 4 percent of the total; contractor employees, about 93 percent; and other government agencies and congressional staff, the remaining 3 percent.

DOE issues five levels of clearances: Q sensitive, Q nonsensitive, top secret, L, and secret. An employee with a secret clearance could have access to weapons-related information; disclosure of this information could result in serious damage to the nation. On the other hand, an employee with a Q sensitive clearance could have access to nuclear weapons design, manufacture, or use data; disclosure could cause exceptionally grave damage to the nation.

This report focuses on the security clearance programs at headquarters and at three field offices that play a vital role in the nuclear weapons program. For example, facilities managed by the DOE office in Oak Ridge, Tennessee, produce and process highly enriched uranium and make weapons components; facilities managed by the Richland, Washington, office produce plutonium; and facilities managed by the Albuquerque, New Mexico, office make detonating devices and combine them with uranium and plutonium to make nuclear weapons.

Of its 220,000 total clearances, DOE headquarters and the Richland, Oak Ridge, and Albuquerque offices have 6 percent, 7 percent, 19 percent, and 23 percent, respectively. Table 1.1 shows the types and numbers of clearances for these locations as of October 1986—the latest information DOE had available.

Table 1.1: Types of Clearances

Location	Q sensitive	Q nonsensitive	L	Top secret	Secret	Total
DOE Headquarters	3,591	7,047	833	174	925	12,570
Richland	205	11,046	4,966	0	1	16,218
Oak Ridge	1,114	32,850	6,183	247	1,311	41,705
Albuquerque	3,969	45,813	1,246	1	3	51,033
Total	8,879	96,756	13,228	422	2,240	121,525

^aData obtained from an October 1986 report DOE generated from its Central Personnel Clearance Index.

Security Clearance Program

The heart of DOE's clearance program is the process by which DOE grants, continues, and revokes clearances. Before granting a clearance, either the Office of Personnel Management (OPM) or the Federal Bureau of Investigation (FBI) conducts background investigations of applicants in accordance with standards prescribed in Executive Order 10450. DOE then reviews the results to determine whether applicants are trustworthy and eligible for a clearance. These organizations may also investigate the backgrounds of current clearance holders if DOE becomes aware of information that raises questions about the holders' trustworthiness. If DOE decides not to grant a new clearance or revoke an existing one, the applicant or employee may ask to have DOE's decision reviewed through DOE's extensive administrative review process.

DOE's security clearance program includes the following elements:

- Prescreening of job applicants to identify those that should not be hired because their conduct, character, and trustworthiness may adversely affect job performance. The screening process has the added advantage of screening out applicants who may not be clearable. Chapter 2 discusses this element.
- Determining which employees need clearances, and at what level, based on their need for access to classified information, material, or facilities. Chapter 5 discusses this element.

- Contracting with OPM or the FBI to conduct personnel security investigations for employees for whom clearances have been requested to ensure their reliability and trustworthiness. Chapter 3 discusses this element.
- Periodically—at 5-year intervals—reinvestigating cleared employees to ensure their continued reliability. This element is covered in our report on reinvestigations.¹
- Evaluating through interviews and background investigations the seriousness of problems identified through reports of arrests, and from various investigative sources. Chapter 3 discusses this element.
- Reviewing through an employee appeal process (administrative review) proposed DOE actions to revoke or deny a clearance. Chapter 3 discusses this element.
- Terminating clearances for employees who no longer need them. Chapter 3 discusses terminations for employees DOE determines to be untrust-worthy and chapter 4 discusses how accurately DOE processes terminations to its clearance data bases.

The headquarters Central Personnel Clearance Index (CPCI), which is DOE's clearance data base of record, maintains computerized files of all clearances, their types, and the location of those holding them. DOE is also placing increasing reliance on the CPCI to provide administrative control over clearances. Six field offices and many contractors also maintain their own automated clearance data bases. Chapter 4 discusses the accuracy of these data bases.

Objectives, Scope, and Methodology

On November 1, 1985, the Chairman, Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations, requested that we review DOE's personnel security clearance program. On the basis of subsequent discussions, we agreed to conduct the work in two phases. During the first phase, we would determine whether DOE is conducting timely personnel security clearance reinvestigations and the ramifications of its not doing so. On March 10, 1987, we provided our phase one results to the Chairman in our report, Nuclear Security: DOE's Reinvestigation of Employees Has Not Been Timely, (GAO/RCED-87-72). In the second phase, we would determine the adequacy of other aspects of DOE's overall personnel security program, such as pre-employment investigations; initial investigations; clearance terminations; and the employee appeal process, or administrative review. This

¹Nuclear Security: DOE's Reinvestigation of Employees Has Not Been Timely, (GAO/RCED-87-72; March 1987).

report provides information on the security clearance program aspects covered in the second phase of our work.

Our work was conducted at DOE headquarters and its Richland, Washington; Albuquerque, New Mexico; and Oak Ridge, Tennessee, field offices. We selected Richland because it is one of three sites DOE is considering for a high-level radioactive waste repository; Albuquerque because it has the largest number of DOE clearances; and Oak Ridge because of congressional concern over alleged widespread drug use among employees at one facility under Oak Ridge's auspices. We reviewed the clearance programs at three Richland contractors and at two contractors each at Oak Ridge and Albuquerque. We selected contractors to include the different mixes of cleared employees at DOE facilities. For example, at Albuquerque, we selected two national laboratories that employ a higher percentage of engineers and scientists than the Y-12 facility that we selected at Oak Ridge.

To obtain a perspective on DOE's personnel security clearance program, we reviewed the Atomic Energy Commission's Appendix 2301, 1968 and DOE Order 5631.2A, December 1985, which set out DOE's personnel security clearance program; DOE's Federal Acquisition Regulations (48 CFR 970.2201), which set pre-employment investigation requirements for new applicants; 10 CFR 710, which sets requirements for the hearing portion of DOE's process for reviewing decisions to deny or revoke a clearance; and the Department of Defense's (DOD's) "Personnel Security Program Regulations" (DOD Directive 5200.2), which set out DOD's personnel security program.

We obtained additional information from DOE headquarters officials in the Office of Safeguards and Security; Albuquerque's Security Division Director and Chiefs of the Personnel Security Branch, Processing Section, and Analyses Section; Oak Ridge's Deputy Director, Safeguards and Security Division, and Chief, Personnel Clearance and Assurance Branch; and Richland's Director, Safeguards and Security Division and Chief, Personnel Security.

For three areas covered—pre-employment investigations, clearance timeliness, and clearance data base accuracy—we used a variety of sampling techniques to test performance.

²The Atomic Energy Commission was DOE's predecessor.

Pre-employment investigations—The objective of this step was to determine whether contractors were performing complete investigations and whether the results were effectively used. As part of our preliminary analysis, we reviewed 20 clearance processing cases at Richland to identify potential problem areas. This analysis covered pre-employment investigations but, because they were completed between 1977 and 1983, they did not provide a current picture of DOE performance. Therefore, in the second part of our analysis, we attempted to select each location's most recently completed cases prior to September 30, 1986, to provide current and consistent data from each one. At Richland, we reviewed 20 investigations for each of 3 contractors—a total of 60 cases. At Oak Ridge, we reviewed 20 similarly recent cases for each of 2 contractors—a total of 40 investigations. At Albuquerque, we discussed the pre-employment program with field office officials and with representatives from two contractors. We did not perform detailed analyses of contractor investigations, but we did review examples of investigations from two contractors.

Clearance timeliness—The objectives of this step were to determine the time required to complete various personnel security actions and identify any bottlenecks. We attempted to identify and review at each location the most recent 10 completed initial clearance cases and 10 completed suspension/revocation cases so that we could identify problems in each type of case. Because the review process can take several years, we also selected five cases (suspension or revocation) that were active but which had completed the hearing process. These cases could help identify more recent changes in the process. We selected cases that were completed or were in the review process as of October 30, 1986. At Richland, we selected 10 completed initial clearance application cases, 10 completed suspension cases, and 5 cases of either type that were still in process, but past the hearing phase. At Oak Ridge, we were able to identify and review 8 completed new applicant cases, 10 completed suspension cases, and 8 cases of either type currently in process for fiscal year 1986. At Albuquerque, we reviewed 16 completed cases—8 initial and 8 suspended clearances—and 5 cases of either type currently in process. For all of these cases, we determined how long it took to complete various steps in the process and how long it took to complete the entire process.

Clearance data base accuracy—The purpose of this step was to determine whether DOE's headquarters and field clearance data bases were accurate. At Richland and Albuquerque, we used a computer program to compare contractor payroll files with field office clearance files. The

objective was to identify cases where clearances on the field files should have been terminated because the clearance holder no longer worked for one of DOE's contractors. We also performed a computerized comparison of the headquarters clearance file with the Richland and Albuquerque clearance files to identify clearances that were active on the headquarters file, but not active on the field office files. We validated the comparisons by having clearance officials review random samples from the lists of clearances that did not match. These samples enabled us, in some cases, to project the number of clearances that should be terminated. We did not do a computerized analysis of Oak Ridge's clearance data bases because of time and resource constraints and because the work at Richland and Albuquerque identified the types and magnitude of the accuracy problems in DOE's clearance data bases.

We discussed the personnel security program with DOE officials and the personnel investigation program with OPM officials and have included their comments where appropriate. As requested, we did not ask DOE to review and comment officially on this report. Our work was performed in accordance with generally accepted government auditing standards, and was primarily conducted between October 1986 and May 1987.

DOE has long required the contractors that manage its major facilities to investigate the job qualifications and suitability of prospective employees before they are hired. While the main purpose of this requirement is to help ensure that a quality work force operates DOE's facilities, it can have the added advantage of screening out, before they enter the clearance process, applicants whose backgrounds and lifestyles suggest that they should not be cleared. In March 1984, DOE set out the specific elements contractors must check in their investigations of job qualifications and suitability. As of March 1987, for six of the seven contractors we reviewed at three DOE field offices, pre-employment investigations (PEIS) were not as effective in screening out applicants as they should have been because PEI requirements were not being fully met. Specifically,

- · three contractors consistently omitted entire investigation elements, and
- three others did not consistently meet all investigation elements.

In addition, Albuquerque officials said that contractors are not always effectively performing some investigation steps and are not using all identified information to evaluate employee suitability. Further, the required investigation elements do not specifically address substance abuse—a factor that clearly affects job suitability and the area that currently raises the majority of clearability questions. Thus, unless contractors conduct extra investigation steps on their own, the currently required investigation steps are not likely to identify these major problem areas.

When PEIs are not done effectively and applicants who should have been screened out are submitted for a clearance, DOE incurs background investigation costs of \$1,850 per applicant when a Q clearance is requested. In addition, large amounts of clearance branch staff time can be involved in processing an applicant's case over as long as 2 years while DOE considers whether a clearance should be granted.

Criteria for Investigations

From about 1949, the Federal Procurement Regulations required the contractors operating DOE's major facilities to use careful personnel investigations called pre-employment investigations, to ensure the qualifications and suitability of prospective employees, but they did not specify what constituted a careful PEI. In the early 1980s, DOE's personnel security officials concluded that contractors were not effectively using these PEIs to screen out applicants who should not be submitted for a clearance. Consequently, contractors hired people who should never

have been employed, and when they submitted these employees for clearances, a large volume of clearability problems arose. These problems caused an excessive amount of work for the security clearance staffs. DOE, therefore, set out to strengthen the regulations.

In March 1984, DOE issued Department of Energy Acquisition Regulations (48 CFR 970.22) which (1) specified the specific items that a PEI should include, (2) required that contractors perform PEIs before a clearance request is submitted, and (3) required that a clearance be granted before an applicant whose job requires a clearance is hired. The regulations require that PEIs include, as appropriate:

- · a credit check:
- verification of high school degree/diploma or a degree/diploma granted by an institution of higher learning within the last 5 years;
- · contacts with listed personal references;
- contacts with listed employers for the past 3 years (excluding employment of less than 60 days duration, part-time employment, and craft/union employment); and
- local law enforcement checks when such checks are not prohibited by state or local laws.

In order to ensure that PEIs are fully completed before clearances are requested, DOE revised its Personnel Security Program Order 5631.2A, dated December 2, 1985, to require that contractors certify that PEIs have been completed before clearances are requested.

DOE Needs to Ensure Compliance With PEI Requirements

Even though PEIs have been required since about 1949 and the required elements in a PEI were set out in 1984, as of March 1987, six of the seven contractors we reviewed were not fully complying with PEI requirements and, in many cases, DOE had not taken steps to identify where contractors were not complying. Not fully using the PEI process to screen out applicants who should neither be hired nor submitted for a clearance is particularly important because the clearance staffs at the three field offices we looked at have not been able to handle their clearance work loads. The work loads have increased because of a large number of applicants with derogatory information, and because of the expanded reinvestigation requirements which DOE initiated in December 1985.

Richland

We reviewed DOE'S PEI performance at Richland in two phases. The results show a pattern of improvement from poor performance in the late 1970s and early 1980s.

In the first phase, conducted in early 1986, we reviewed the files of 20 employees and clearance applicants who were in the clearance review process—DOE/RL had identified derogatory information on these employees/applicants through background investigations and was considering whether to revoke or not grant their clearances. Deficiencies in 17 of these 20 cases, where PEIs were conducted between 1977 and 1983, suggested that contractor PEI performance was inadequate in 4 general areas:

- · PEIS were not always done;
- PEIS performed were sometimes incomplete because information sources were not always contacted, as required;
- when sources provided derogatory information, contractors did not always follow up;
- when substantial derogatory information was identified, applicants were hired with no indication that the potential problem was resolved.

As a result of inadequate PEIs, applicants may have been hired and submitted for a clearance who should not have been hired. For example, one contractor hired an applicant in 1978 after the applicant's PEI revealed over 20 convictions for driving while intoxicated, reckless driving, and driving with a suspended license. The applicant was submitted for a clearance in July 1978 and received an L clearance, which requires only a limited investigation, in September 1979. DOE requested a more extensive supplemental investigation for a Q clearance in July 1982. DOE denied the Q clearance request and terminated the L clearance in September 1985 for alcoholism and other problems.

In the second phase of our PEI review, conducted between October 1986 and March 1987, we reviewed the PEI performance of 3 contractors by evaluating the 20 cases each contractor most recently completed prior to September 1986. Of the 60 cases reviewed, 46 met all criteria and 14 contained items of noncompliance. In one case, a contractor did not verify the lower of two educational degrees cited. In nine cases, contractors verified some, but not all, personal references, and in seven cases contractors did not check all employers—usually the applicant's current employer when the applicant requested that he not be contacted. The varied deficiencies in these 14 cases did not show a pattern of poor performance in any PEI category, and one contractor had only minor

instances of noncompliance. The three contractors said their PEI screenings were disqualifying some applicants.

Richland attributes the improved PEI performance to its promotion of contractor compliance starting in 1984. For example, in May 1984, Richland sent each contractor a copy of the criteria newly set out in DOE's March 1984 acquisition regulations. In response to findings in a July 1984 Richland task force report, in September 1984 Richland advised its contractors that some were not meeting PEI requirements; asked all contractors to review their programs; and directed them to report by October 31, 1984, on their findings and planned improvements. In addition, Richland began auditing contractor compliance in 1985, and, in response to the December 1985 DOE order, implemented a program for certifying PEIs on May 6, 1986. This implementation occurred several months ahead of the other field offices' program implementation.

Albuquerque

When we began our review in the spring of 1986, the two DOE/AL contractors we reviewed—Los Alamos and Sandia National Laboratories—did not perform major portions of the PEIs that had been specifically enumerated in 1984. As of May 1986, Los Alamos did not do crime and credit checks, rarely did prior employment verifications, and checked educational history only if individuals had left school within the last 5 years. Sandia did not do crime and credit checks.

On July 3, 1986, Albuquerque notified its contractors that it would not accept clearance requests after September 1, 1986, unless they were accompanied by a certification that complete PEIs had been performed—a requirement that DOE had established DOE-wide in December 1985. In July 1986 and January 1987, Sandia and Los Alamos respectively hired investigative services to perform parts of their PEIs. Sandia and Los Alamos began certifying their PEIs in October 1986 and January 1987, respectively. In December 1986 Albuquerque told us both laboratories were in full compliance.

However, as of March 1987, we found that both laboratories were not in full compliance. In the cases we reviewed, Sandia did not do personal reference checks for recently graduated professional and technical applicants but submitted certifications that complete PEIs were done. Sandia officials said they had Albuquerque approval for this practice, but they had no documentation and the Chief, Personnel Security Branch, at Albuquerque said they did not make such an agreement. In March 1987, Albuquerque said it was drafting a memorandum to direct

Sandia to comply with this requirement. On May 5, 1987, Sandia directed its personnel department to obtain personal reference checks on all candidates for employment.

In March 1987 we also reviewed about 10 Los Alamos files with Albuquerque clearance officials and found that over half were not in compliance. In some of these cases, Los Alamos submitted clearance requests with no PEIs for prospective employees to whom Los Alamos had made job offers prior to November 1986, the date when Los Alamos began implementing its PEI program. In other cases, the laboratory sent Albuquerque clearance applications with notes that the PEIs would be done later. Los Alamos officials told us the latter practice was used in about 17 cases to expedite clearances for prospective summer employees. This practice defeats the purpose of the PEI, because Albuquerque will likely already have requested an OPM investigation for such applicants by the time the PEI is completed. In both the Sandia and Los Alamos situations, Albuquerque was not aware, prior to our March 1987 discussions, that the contractors were not adequately performing PEIs and the Clearance Branch Chief agreed that these situations did not comply with PEI regulations.

Oak Ridge

At Oak Ridge neither contractor—Martin Marietta Energy Systems, Inc., and Rust Engineering Co.—met all PEI requirements as of February and March 1987, respectively. However, Martin Marietta performs most of the PEI items and also obtains information during the PEI process on applicant use of illegal drugs. Rust did not perform several important portions of the PEI.

Between November 1986 and March 1987, in 13 of 20 recently completed PEIs at Martin Marietta, some of the required steps had not been completed. The missing steps included educational verifications, references, and short-term employer checks. However, Martin Marietta has two important enhancements to its process. It uses a structured interview to identify information such as drug use and alcohol abuse, and it conducts a drug screening test. As a result of its program, 25 to 30 percent of Martin Marietta's 615 applicants since January 1986 were not hired because of information identified in the PEI process, according to Martin Marietta's Chief, Central Employment.

The PEI program at Rust Engineering presents quite a contrast. Our review of 20 cases showed important and pervasive omissions. None of

the files contained evidence of educational verifications or personal reference checks. More importantly, information that identified problems that should have been followed up showed no indications of having been checked. For example, one applicant claimed no arrests, but the police check, conducted as part of the PEI, showed three. The file showed no follow-up on this apparently inconsistent statement by the applicant.

A March 1987 draft report by an Oak Ridge Technical Inspection Group found similar results from its review of how Rust conducted PEIS. It found that

"a random sampling of security files of people hired in 1985 and 1986 revealed that very few contained any evidence that a pre-employment check has been conducted."

Oak Ridge clearance officials were unaware of both contractors' deficiencies until the Technical Inspection Group and we brought them to their attention. According to the Oak Ridge Chief, Personnel Clearance and Assurance Branch, the contractors were required to sign certifications on each request for a clearance stating that the PEIs had been performed, and she relied on the contractors' certifications that PEIs were properly done. The Deputy Director of Safeguards and Security at Oak Ridge told us the Technical Inspection Group's report on Rust Engineering would result in strong recommendations. Further, according to the Chief, Personnel Clearance and Assurance Branch, all Rust Engineering clearance requests were being held without processing until the matter was resolved. For the other contractor, Martin Marietta personnel officials agreed that they were not always satisfying all the basic criteria and said they would use the cases we presented to better train their employees involved in the PEI process.

PEIs Are Not as Effective as They Could Be

Our review of PEI results shows that most contractors are not identifying many problems that exist with their job applicants. For example, the Los Alamos and Sandia contractors together identified derogatory information for only 3 of over 500 applicants. Rust officials did not remember refusing employment based on information from a PEI. The limited derogatory information these contractors identified through PEIs is substantially less than should be found, considering the extensive amount of derogatory information that applicants frequently report on the personnel security questionnaires (PSQ) they submit when requesting a clearance, and on background investigations which frequently turn up derogatory information. For example, an Albuquerque official said that derogatory information is identified in over 50 percent of all cases.

The PEIs are not identifying all the information they should because contractors are not effectively meeting current PEI requirements. Moreover, current PEI requirements are not adequate to identify the major items of derogatory information that determine employment suitability and clearability.

PEI Requirements Are Not Being Met

PEIS are not as effective as they should be in ensuring applicant suitability and clearability because

- contractors, as a matter of policy, omit PEI steps;
- contractors are not effectively performing investigative steps; and
- contractors do not use all identified information to evaluate suitability.

Contractors Omit Steps

While none of the contractors had fully completed PEIS, three, as a matter of policy, chose not to implement certain elements that could identify important information. For example, Martin Marietta, an Oak Ridge contractor, does not do credit checks, although Rust Engineering, another Oak Ridge contractor, does. Martin Marietta, in a letter dated January 31, 1985, told Oak Ridge that it does not perform these checks because its attorneys have interpreted a federal court decision as precluding the routine use of credit investigations as part of PEIs because they tend to have a discriminatory impact. Oak Ridge accepted Martin Marietta's decision not to do the credit checks, according to Oak Ridge's Deputy Director of Safeguards and Security. However, at our request, Oak Ridge is restudying whether Martin Marietta should be required to do these checks. Rust Engineering, for its hourly employees, does not interview applicants because they are selected by the union, does not always do reference checks because the Chief of Personnel at Rust does not consider them valuable, and does not do education checks because the applicant's craft knowledge is considered more important than his or her education. Sandia, a contractor under the Albuquerque office, did not do personal reference checks on professionals recruited from colleges until at least May 1987 when Albuquerque directed it to begin doing them. Sandia representatives said they had not done these checks because they thought they had an agreement with Albuquerque to check faculty at the universities from which most of the new professionals recently came, rather than reference checks.

Contractors Are Not Effectively Performing Investigative Steps

Albuquerque security officials also pointed out several cases where it appeared that contractors were not effectively performing PEI steps and thus were not identifying all the derogatory information they should. If they had, the contractors would not have hired some applicants. For example, employment checks are also routinely conducted in personnel security investigations; these come back to Albuquerque with a great deal of derogatory information, officials said. In one case, 6 of the individual's past 10 employers had terminated the person under negative circumstances. The Albuquerque officials felt that this would have been picked up by a thorough PEI. Background investigations also frequently contain a history of arrests, which, according to Albuquerque officials, properly conducted PEIs should identify. An Albuquerque security official described a case in which the PEI did not reveal that the man being investigated had been tried for murder. He was hired before his clearance was granted and, while his clearance was in process, he attempted to run over his supervisor with a forklift. The official felt that the man's request for clearance should have never been submitted, and that he would have been eliminated from consideration by a proper PEI.

Contractors Do Not Use All Identified Information to Evaluate Suitability

Albuquerque security officials pointed out that in making hiring decisions, contractors generally do not fully use the derogatory information identified. Los Alamos contractor representatives said they do not use all the derogatory information developed in the PEI because they believe they should use the information only when there is reasonable assurance that it will affect employment. Thus, the derogatory information must relate to the skills, knowledge, and abilities necessary to perform the job in question. Albuquerque officials believe, however, that about 95 percent of the information developed is employment related and should be used. These opposing views represent an unresolved difference between how contractor and Albuquerque security officials believe PEI information should be used.

PEI Requirements Do Not Address Major Problems

Over the last several years, substance abuse—primarily drug, but also alcohol—has been a recurring problem at a number of DOE facilities. The personnel security process—personnel security questionnaires and background investigations—identifies derogatory information on over half of clearance applicants, according to DOE officials. At Oak Ridge, for example, the derogatory information for over half the clearance cases is drug related. Despite the pervasiveness of drug-related derogatory information, the PEI process does not specifically address drug use.

Therefore, drug problems may not surface until later in the clearance process.

Martin Marietta has expanded the PEI process to identify drug use problems. It conducts structured interviews that specifically address drug use and tests each employee for drug use prior to employment. As a result of these steps and the standard PEI steps, Martin Marietta screens out 25 to 30 percent of its applicants.

Impact of Not Conducting Effective PEIs

PEIS are intended to aid the contractors in employing a reliable workforce. Thorough PEIS help to identify potentially ineligible applicants with derogatory information before contractors make employment offers and submit clearance requests. DOE headquarters and operations office officials believe that PEIS can screen out problem applicants. However, PEIS have not been fully effective in screening out such applicants because, as previously noted, contractors do not always adhere to PEI requirements. Further, PEIS do not include other important information related to drugs and alcohol, and that information is not always sought.

The cost of not screening out applicants with clearance problems is substantial. OPM background investigations for clearances cost \$1,850 each. In addition, large amounts of clearance branch staff time, as well as time from legal offices, hearing examiners, review examiners, and Defense Program Management can be involved in processing an applicant's case over as much as 2 years while DOE considers whether a clearance should be granted. (These processing steps are discussed more fully in ch. 3.) This staff time could be used to accelerate processing on many cases that contain no derogatory information.

These costs can be overshadowed by the payroll costs if, as often happens, the employee is hired before being cleared and the contractor (and ultimately DOE) must pay salary costs while the employee cannot do the job he or she was hired to do. After an employee has been on board three months, these costs can range from \$750 to \$1,500 a month per employee.

Conclusions

Three years after DOE issued specific guidance on the requirements for completing PEIs, six of the seven contractors we reviewed were not in full compliance. Three of them were not complying in important areas such as personnel reference and credit checks and educational verification. Two of the three responsible field offices—Albuquerque and Oak

Ridge—were unaware of the compliance deficiencies because they relied on contractor certifications that they were doing complete PEIS. However, the contractors submitted certifications when major PEI elements were not done. For the other, Oak Ridge was aware that Martin Marietta was not doing credit checks.

PEIS have not been fully effective in identifying ineligible job applicants, in part because contractors were not meeting requirements, but also because they (1) specifically chose not to do certain steps because of perceived legal concerns—a decision which Oak Ridge is reconsidering, (2) do not effectively perform all steps, and (3) did not use all the information they had. In addition, contractors did not specifically address drug and alcohol use—items not required in the PEI process. As a result, DOE has incurred unneeded costs for background investigations and tied up clearance branch staff processing clearance applications that should never have been submitted.

Recommendations

To improve the effectiveness of the PEI process, we recommend to the Secretary of Energy that DOE

- ensure contractor compliance with security clearance PEI requirements, and
- amend its regulations to require contractors, as part of their PEIs, to specifically address drug and other substance abuse in the determination of employee suitability.

DOE takes too long to make personnel security determinations, including granting new clearances, suspending existing clearances, and reviewing clearance denials and revocations. DOE's lack of timely clearance decisions results in deviations from some clearance procedures, lowers productivity, increases cost, and poses a security concern. According to DOE security clearance officials, the clearance process is time-consuming for several reasons: OPM, which conducts most clearance investigations for DOE, takes twice as long as its guidelines call for; DOE's clearance branches do not have adequate staff; and the process lacks criteria for how long various steps should take.

Overview of Security Clearance Process

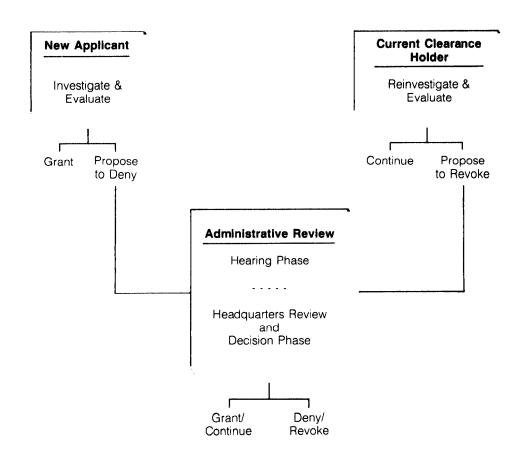
The Atomic Energy Act of 1954 requires does to ensure the trustworthiness of individuals who have access to classified information, materials, or facilities. One mechanism doe uses to help provide this assurance is its personnel security clearance program. Doe's security clearance process has two main tracks—one for new applicants and one for current clearance holders—which converge in a common review process. New applicants are investigated by OPM or the FBI. If they are found trustworthy, doe grants them a clearance. Doe requires current clearance holders to be reinvestigated at 5-year intervals. If doe continues to find a currently cleared employee trustworthy, his or her clearance is continued. If doe considers a new applicant or a reinvestigated employee untrustworthy and proposes to deny or revoke a clearance, the individual can request a review of his or her case through doe's administrative review process.

Figure 3.1 depicts the major elements of DOE's clearance process. The detailed steps for obtaining a clearance are shown in appendix I, and the steps in the administrative review process are shown in appendix II.

Obtaining a Clearance Takes Too Long

Contractors and program offices say that the current process for obtaining a clearance takes too long. The time varied among the offices but averaged 5-1/2 months for cases with no derogatory information and 9 months for cases with derogatory information. At headquarters, the average time to obtain a clearance is almost 12 months. Headquarters could not readily separate times for clear cases from those with derogatory information. Slow clearance processing reduces contractor productivity, promotes staffing practices that violate DOE's regulations, and adds to contractor and DOE costs.

Figure 3,1: DOE's Clearance Process



OPM and DOE Contribute to Slow Processing

Both OPM and DOE contribute to the long time required to obtain a clearance. To obtain a clearance, prospective employees submit a personnel security questionnaire (PSQ) to DOE. DOE has OPM, or in some cases, the FBI, examine the applicant's background, and DOE reviews the results. Over half the cases identify derogatory information that requires further follow-up. Table 3.1 gives OPM investigating and DOE processing times for Q clearances.

Table 3.1: Average Number of Days to Process Applications for Q Clearance, Fiscal Year 1986^a

Clearance Office	OPM	DOE	Total
Albuquerque	and his tips: all selections was a Management ; books figures of selecting save per		
Clear	170	9	179
Derogatory	200	128	328
Richland			
Clear	170	9	179
Derogatory	180	62	242
Oak Ridge			
Clear	116	36	152
Derogatory	177	106	283
Headquarters			
Clear and	e and the second of these of a second to be a second		
Derogatory	185	168 ^b	353
DOE Overall	185	69	254

⁴Richland data cover December 1985 to September 1986 and headquarters data cover October 1986 to March 1987.

As the table shows, OPM exceeds its 75-day target by 1 to almost 3 months for clear cases and by 3 to 4 months for derogatory cases. In a recent report, we pointed out that OPM was not meeting its target times because it did not hire or otherwise obtain sufficient investigators to keep current with agency requests for background investigations. OPM is taking steps to improve its timeliness. The Office of Federal Investigations—the OPM office responsible for performing background investigations—requested and received approval to increase its staff from 402 in fiscal year 1986 to 599 in fiscal year 1987. OPM planned to be close to the approved staffing level by July 1, 1987, the OPM Director said in May 1987. According to the Chief of OPM's Investigations Background Division, on September 1, 1987, OPM had about 499 of the 599 investigators on board and was having a great deal of difficulty recruiting and keeping investigators. In addition, because of a projected increase in DOE generated work load, he estimates opm will need a total of 628 federal investigators in fiscal year 1988. He also said that OPM is linking all its offices by computer, which will decrease processing time by eliminating time spent in mailing investigation requests and reports. The schedule

^bThis figure overstates the time DOE requires because of an anomaly DOE discovered in October 1987 concerning how its computer system tracks the process for granting DOE clearances to already cleared employees of other government agencies. DOE did not yet have a more accurate figure. Source: DOE.

¹OPM Revolving Fund: Investigation Activities During Fiscal Years 1983 Through 1986 (GAO/GGD-87-81, June 26, 1987).

calls for testing the system in January 1988 and fully implementing it 3 months later.

IDDE's clearance offices have also been slow in processing clearances after receiving background investigations. Albuquerque and Richland came close to meeting the 7-day processing target DDE established for clear cases, but Oak Ridge took 36 days. For derogatory cases where DDE has no overall target, DDE's processing time ranged from 2 to 4 months in the field offices. Headquarters, which did not separate processing times for clear and derogatory cases, had a combined processing time of over 5 months. DDE's processing time has been slow, according to clearance branch officials, because they have had, and Albuquerque, Oak Ridge, and headquarters continue to have, inadequate staff to handle the expanding clearance work load.

A contributing cause of clearance delays is the absence of required clearance time frames or tracking systems for new applications with derogatory information. Because DOE Order 5631.2A establishes a 7-day goal for processing clear cases, the limited available resources are usually focused on these cases rather than the more difficult cases with some derogatory information. The above statistics also support this observation in that while Albuquerque took much longer to process derogatory cases, it still essentially met the 7-day goal.

Impact of Slow Clearance Processing

The long time required to obtain a clearance affects contractor productivity, leads to staffing practices which violate DOE's regulations, and adds to program costs. Specifically, DOE and its contractors told us they have difficulty recruiting quality personnel because job applicants will not or cannot wait 5 to 12 months for a clearance. Furthermore, vacancies exist for long periods and contractors cannot respond quickly to provide staff for short-term or rapidly expanding projects without hiring uncleared personnel.

To compensate for these problems, contractors bend various regulations. In March 1984, doe revised the doe Acquisition Regulations to specifically preclude contractors from hiring applicants before they are cleared. Los Alamos and Sandia said that they considered the requirement unworkable while clearances are so time-consuming, and that they would continue to routinely hire applicants before they are cleared.

DOE Order 5631.2A also prohibits obtaining a clearance for an individual when no projected vacancy exists. However, two contractors have violated this regulation by creating pools of cleared individuals who can fill a vacancy that may later develop. For example, Rust Engineering at Oak Ridge maintained a pool of 869 and 778 cleared individuals in 17 trades in 1985 and 1986, respectively. Rust Engineering hired these individuals through their respective unions to meet Rust's fluctuating workload. In addition, the Paducah Gaseous Diffusion Plant, also under Oak Ridge, maintained a pool for which clearances were obtained for 200 to 300 people who were never employed. In June 1987, the Chief, Oak Ridge Personnel Clearance and Assurance Branch, obtained information from a Paducah security official that the pool had been discontinued and that the unneeded clearances were terminated, but no records were available to document when the pool was eliminated.

When contractors create pools of cleared people, many of whom are not subsequently employed, DOE incurs added clearance costs. For example, DOE's Inspector General concluded that Paducah's clearance pool cost DOE as much as \$480,000 in wasted clearance costs.

Delays in the clearance process also increase program costs. One contractor estimated these costs at \$179,000 a year to cover the costs of providing work space and supervision in an annex the contractor maintains for uncleared employees.

Another cost results from paying employees for jobs they were hired to perform, but cannot do until they are cleared. DOE estimated this cost at about \$750 to \$1,500 a month for each employee who remained uncleared beyond 3 months. Sandia estimated this cost at \$1,320,000 in fiscal year 1984, the last year it had such data available.

DOE's Clearance Suspension Process Is Lengthy

DOE takes a long time—13 to 17 months in the cases we looked at—to suspend the clearances of individuals of questionable trustworthiness. Taking over a year for such suspensions may create an unnecessary security risk at the facility where they work because prior to suspension, employees usually maintain their clearances and potential access to classified information, material, and facilities. Also during this time, contractors are unlikely to take special precautions to control the access of these employees because DOE usually does not notify them that an employee is being investigated.

Lack of Staff and Time Frames Lessens Timeliness

When DOE learns of derogatory information, as specified in 10 CFR 710, concerning a current clearance holder, it must evaluate the information and determine whether the individual's clearance should be suspended. A final decision on revocation is considered during the administrative review process. Each field office manager has the authority to suspend a clearance based on his or her subjective determination of when a case warrants suspension. While the decision can be made at any time and is sometimes made in a few days, the field offices we looked at, for 27 cases that completed administrative review, ranged from 13 to 17 months to suspend a clearance—the time being split between OPM and DOE. OPM reinvestigations, which DOE obtains to verify alleged derogatory information, take about 6 months on average and DOE takes an average of about 9 additional months to make a decision. Neither headquarters nor the field offices provide guidance on how long it should take to reach a suspension decision.

Many reasons exist to explain the lengthiness of the suspension process. For example, (1) backlogs of interviews prevent security clearance staff from promptly interviewing employees being considered for suspension, (2) typing interviews for management review takes a long time, (3) obtaining PSQs from employees who have no reason to be prompt requires staff attention, (4) OPM's investigation often takes 6 months, and (5) preparing a case for the review process that usually follows suspension is time-consuming. DOE officials said lack of resources contributes to lengthening the time required to perform nearly all the above steps.

The average suspension investigation time could be substantially reduced without violating employee rights if priority attention were paid to cases where suspension is being considered. One case at the Oak Ridge Y-12 facility, where it took almost 14 months to suspend a clearance, contains many of the problems noted above and suggests where reductions in time could be obtained. Oak Ridge officials said this case and related drug cases did not initially get priority attention because they were understaffed for the large volume of work they had. In this case,

- Oak Ridge obtained information on January 18, 1985 that the subject a security guard—used drugs.
- Oak Ridge requested the security guard to complete a PSQ on February 1, 1985, which was received on February 6, 1985.
- Oak Ridge requested a background investigation from OPM on March 7, 1985, based on an updated PSQ.

- Oak Ridge received OPM's investigation on August 17, 1985—almost 5-1/2 months after submitting it to OPM. The investigation contained allegations that the security guard used cocaine and amphetamines while on duty.
- Oak Ridge interviewed the guard on September 6, 1985. The process of writing and typing the interview took until October 28, 1985. During most of these 52 days the interview was in the typing pool waiting to be typed.
- The suspension package entered the review process on March 2, 1986, and suspension was approved on March 5, 1986. The chronology that Oak Ridge prepared covering this and other cases listed no activities for this case between the completed interview and the date the suspension package was submitted—a period of 4 months.

Delays in Suspensions Can Create Security Concerns

When employees of questionable trustworthiness maintain their clearances and potential access to classified information, material, or facilities while their suspensions are being considered, security concerns may arise. For example, in one of the cases we reviewed, an electrician at a contractor plant who had a history of alcohol-related arrests was charged with aggravated assault. Doe took 23 months to suspend the clearance. The time included 15 months for an opm background investigation. Prior to suspension, the employee had access to classified information.

In another case, an individual in charge of computer-related activities retained a clearance, access to all facility areas, and possible access to Secret Restricted Data for more than 9 months while DOE verified allegations of drug use. About 3-1/2 months of that time is attributable to the OPM investigation. After the clearance holder acknowledged using, buying, and selling drugs, DOE took almost 4 months to suspend the clearance.

Administrative Review of Denials and Revocations Takes Too Long

When DOE proposes to deny a clearance application or revoke a clearance which it has suspended, the affected individual has a right to have that decision appealed in DOE's two-phase administrative review (AR) process. (The steps in the AR process are set out in app. II.) The first phase is a hearing at which the individual can present his or her case to a hearing examiner. The hearing phase has numerous required time frames which our review showed are generally met. The second phase, which is primarily a headquarters review, is not bound by required step-

by-step time frames and takes about 9 months, although its overall target is 3 months.

The entire process—phase I and phase II—may be more complicated than is necessary. That is, it has more procedural steps than DOE has been able to complete within its informal overall time goal of 1 year. Instead, DOE takes an average of 18 months for cases completing the entire process. The extensive time to make AR decisions is also costly because employees who were hired without a clearance or whose clearance has been suspended must be paid while decisions are being reached, even though they often cannot do the job for which they were hired without a clearance.

Hearing Process Time Frames Are Generally Met

The steps and related time frames for the hearing process are set out in 10 CFR 710. The major element is the hearing where the individual in question, accompanied by counsel, can refute DOE's allegations before a hearing officer. The regulations allow about 7-2/3 months for the entire process through the hearing officer's recommendation. Headquarters monitors the time frames for each element, and the offices generally meet them. However, at the offices we visited, the hearing phase exceeded the total time frame goal by about 1 month.

Headquarters Review Phase Lacks Time Frames and Takes Too Long

Headquarters officials believe the headquarters review process should be completed in 3 months, but it usually takes about 9 months to complete. DOE has required time goals for only two of many review steps and even those may significantly exceed the goals established.

One step with a time frame provides an affected individual 5 days to respond to DOE's notice that the hearing examiner recommended denial or revocation of his or her clearance, and that the individual can request a review by the personnel security review examiners. Even this simple notification step can be a major source of delay, sometimes taking months. DOE must notify the individual by certified mail that a review by the Personnel Security Review Board can be requested. Because it takes 3 weeks for DOE to receive the returned certified mail notice, DOE must wait 3 weeks in addition to the 5 days before proceeding if it has no response. However, most applicants request and receive a 1- or 2-month extension beyond the 5 days to prepare a brief for the review examiners. Once the case is given to the review examiners, they are alloted 45 days to complete their review, but sometimes take 3 to 4 months.

Beyond these steps, the clearance branch must consolidate all the paperwork from the case into a brief for the Office of General Counsel to review and for the Assistant Secretary for Defense Programs to use as a basis for his decision. The consolidation, ogc review, and final decision steps have no required time frames, and they can add substantially to the total time. For example, our review shows that the consolidation and legal review frequently takes 1 to 2 months. Doe has an informal target of 95 days for the total headquarters review process, but the completed process takes an average of about 9 months—almost as much time as DOE informally allots for the entire process.

The lengthy AR process has important cost consequences for contractors and DOE. These costs result when contractors hire employees before they are cleared and when cleared employees are suspended. DOE estimated that when the time an employee cannot do the job for which he was hired exceeds 90 days, the wasted wage cost is \$750 to \$1,500 for each additional month. One contractor estimated the lost wage costs related to one suspended employee at about \$44,000 over the suspension period. As the number of cases in AR increases, the effect of lost wages also becomes more important.

DOE's AR Process May Be Too Complicated for the Resources Available to Administer It DOE clearance branch officials developed the AR process to provide due process for people affected by decisions to deny or revoke a clearance. The steps in the process are not set in law or regulation and represent only one approach to providing due process. The process was designed when only 50 cases were in AR at a time. Even with that case load, as recently as the early 1980s the AR process was much longer because the review board could take 2 to 3 years, according to the headquarters Chief of Administrative Review.

DOE has reduced AR time to 18 months, but DOE's progress may be overcome by more recent circumstances. The revised December 1985 reinvestigation requirements have led to increased numbers of derogatory cases and pushed the number of AR cases in process up to 268 cases in 1987. Drug testing, which DOE is considering for its employees, could push the numbers to perhaps 1,000. Such increases will require more staff or a revision of the review process to prevent processing times from returning to 1980 levels.

DOE's review process is only one possible approach. Other processes are also available. For example, the Department of the Navy provides a review process in which an in-person hearing is prohibited; instead,

affected individuals answer allegations in writing. The former head of Navy's review process said that over the 2-year period (1985 to 1987) when he headed the Navy appeal board, it took about 4 months to process cases from the identification of derogatory information to a final decision—a process that averages about 31 months at DOE when employees avail themselves of the complete process.

Conclusions

Obtaining a doe clearance takes longer than contractor officials believe it should. The time ranges from about 4-1/2 to 12 months at the offices we reviewed. The extensive time impedes contractor ability to recruit quality staff and promptly fill vacancies, leads some contractors to violate regulations in an effort to compensate for clearance times, and increases doe project and clearance costs. One reason for the time taken for obtaining a clearance is that opm averages about 6 months to complete its share of the process, according to doe data, rather than the 75 days which is its own goal. Further, clearance branch staff shortages prevent timely processing, especially for cases involving derogatory information. The processing time can range from 9 to 36 days for clear cases and from 62 to 168 days for cases with derogatory information that do not go to AR.

The time required for DOE to suspend a clearance for the cases we looked at was about 13 to 17 months—more than twice as long as it is expected to take. During this time, employees continue to have their badges and access to classified facilities and information. Also during this time, contractors are unlikely to take special precautions to control the access of these individuals because DOE usually does not notify them that an employee is being investigated. DOE has no time frames for suspension decisions; staffing shortages make suspension processing more time-consuming, according to DOE officials. In addition, OPM takes about 6 months, and often longer, to complete background reinvestigations. If time frames were established and suspensions were given priority processing both at DOE and OPM, with adequate DOE staff, suspension time could be substantially reduced.

The time opm has taken to complete background investigations has contributed to the time required for DOE to grant and suspend clearances. In a June 1987 report, we pointed out that insufficient staff caused opm's untimely performance. OPM has authorized an increase in its investigation staff from 402 to 599, but after almost 1 year, was only able to reach 499 by September 1, 1987. OPM is also automating its mailing system to provide more timely background investigations. When and if

these steps are effective, OPM may meet its 75-day processing target and become less of a factor in DOE's process for granting and revoking clearances.

DOE's two-phase AR process for reviewing decisions to deny or revoke a clearance takes about 18 months—6 months longer than DOE's informal target of 1 year. The hearing phase is covered by time frames set out in regulations and is usually completed on time. The review phase is not covered by time frames and takes about 9 months, compared to DOE's informal target of 3 months.

DOE'S AR process is only one possible way of providing due process for individuals who face a clearance denial or revocation. DOE has not been able to complete the many steps in its process within the time it considers reasonable, and the time may extend further as the number of cases in process increases. DOE's process is not required by law, and other federal organizations have different systems that can be completed more quickly. Navy's process is one example.

Recommendations

To improve the timeliness of security clearance processing and avoid unnecessary costs and adverse impacts on security and productivity, we recommend to the Secretary of Energy that DOE

- establish required time frames for accomplishing all major security clearance steps;
- take needed actions to ensure that sufficient staff are assigned to implement and adhere to those time frames; and
- assess whether a simplified AR process is appropriate for DOE and, if so, adopt it.

DOE does not accurately maintain important security clearance information on its 209,000 cleared contractor and federal employees. Headquarters maintains DOE's official clearance data base, and six of eight field offices maintain their own independent clearance data bases in addition to supporting the headquarters system. Most of the contractors we covered maintain their own clearance data bases. These various data bases, independently created to serve individual needs, are not completely compatible and thus poorly communicate with each other. As a result, the multi-level data base system exacerbated the impact of other problems that contribute to clearance inaccuracies. For example, a shortage of staff was one reason offered to explain why clearance data bases were not kept current. Further, wasteful double data entry, complicated updating, and inadequate error checking inherent in the automated systems at various locations heightened the impact of staff shortages because each put added demand on staff resources.

The most important result of these problems is that the data bases do not accurately reflect the clearances that should be active. In many cases, clearances remain active when they should have been terminated, and in other cases employees have badges that indicate that they are cleared, but their clearances are not listed on the data bases.

These problems make it difficult for DOE to manage the clearance program. Because the central clearance data base is not fully accurate, DOE cannot accurately estimate its clearance reinvestigation work load. In particular, where clearances are not listed on any clearance data base, those holding unlisted clearances might never be reinvestigated. These problems may also raise security concerns. When clearances that should be terminated remain active on the data base of the office that issued them, one element in DOE's multi-element system for preventing unauthorized access to facilities and to classified material may be compromised.

In addition, the clearance data are not accurate or complete. The clearance files contain incorrect clearance levels and incorrect or missing social security numbers. Accurate social security numbers are important because they provide a unique identifier for each clearance holder. Social security numbers are also a key element in automated techniques for ensuring data base accuracy because they are the common data element used to compare files.

Background

DOE headquarters operates the CPCI, a data base that lists active clearances for headquarters and field office staff. The CPCI also shows information such as the field office responsible for clearance files, the types of all clearances, the date of the last reinvestigation, and the social security number and date of birth of each clearance holder. The CPCI began as a card file in 1947 and was automated in 1968, according to the headquarters Chief of Administrative Review. Because of the automated equipment then available at DOE, the system required that updates be processed as a group rather than in individual transactions. More advanced equipment is now available at headquarters and DOE is considering modernizing the data entry process so that field offices can process transactions as they occur.

Field offices implemented their systems to meet local needs for updating files quickly and creating reports on the status of local clearances, and not necessarily to coordinate with the CPCI. Albuquerque automated its clearance process in 1968, Richland automated its system in 1981, and the Oak Ridge automated system had its first test run in April 1987. In total, six field offices have their own system and two, plus headquarters, rely on the CPCI, according to headquarters officials. Headquarters clearance officials do not have the authority to tell the field offices how to control their clearances, the officials said.

In addition to the clearance files that DOE headquarters and the field offices maintain, contractors also maintain clearance data bases for their own uses. These systems are not connected to DOE's data bases and represent a third level of data bases for which DOE is paying.

DOE's Data Bases Do Not Accurately Reflect Active Clearances

DOE's regulations require clearance offices at headquarters and the field offices to maintain accurate control over clearances granted to DOE and contractor employees. Recent assessments of clearance data bases by DOE's Inspector General, field office managers, and our current work show that large numbers of individuals continue to have clearances and/or are listed on clearance data bases as having clearances although they are no longer associated with DOE. In some cases, former field office contractor employees continue to have active clearances on both the field office and central DOE system; in other cases, clearances are terminated on the field system but not on the central DOE system.

A less prevalent but equally important problem is that some employees have clearances but are not listed on any clearance file as having an

active clearance. We found instances where this situation existed for contractors under the Albuquerque and Richland field offices.

Clearances Are Not Promptly Terminated

The most prevalent problem we identified in the accuracy of DOE's active clearance files was that DOE headquarters, field offices, and contractors did not promptly terminate clearances when employees left, died, or no longer needed clearance. The DOE Inspector General found these problems on the CPCI for headquarters and we found similar problems at Albuquerque and Richland, and to a lesser extent, at Oak Ridge.

The field offices' and headquarters' clearance files had or continue to have clearances that should be terminated because (1) contractors and DOE program offices do not promptly notify the contractor and/or field office security branches when clearances should be terminated, and (2) the field offices do not promptly update the CPCI. These problems are discussed below for headquarters and each field office.

Headquarters

In September 1984, the DOE headquarters Clearance Branch began assessing the validity of the 17,690 clearances the CPCI listed for headquarters. DOE wanted to improve its clearance data by, among other things, identifying and eliminating active clearances that should have been terminated because the holders no longer worked for DOE or its contractors or otherwise no longer needed the clearance. As a result of both DOE Inspector General and headquarters actions, 5,400 clearances have been terminated and steps are being taken to promptly report terminations.

Prior to headquarters completing its effort, DOE's Inspector General audited the headquarters clearance files between October 1985 and February 1986, also focusing on clearances that should have been terminated. On July 9, 1986, the Inspector General reported that more than 5,500 of 15,542 clearances that were active in October 1985 should be terminated because the clearance holders no longer had an affiliation with the Department. The Inspector General's report concluded that three-fourths of the clearances remained active because the organizations responsible for notifying the clearance branch that clearances should be terminated did not understand their responsibility for providing such notice and were not complying with it. In addition, the security office did not have a procedure to independently verify the continued need for clearances. About one-fourth of the clearances were active because, after receiving a termination notice, security did not terminate

the clearance on its files. As a result of its own work and the Inspector General's report, headquarters terminated over 5,400 clearances between September 1984 and April 1987.

Headquarters has taken several steps to ensure that future terminations are promptly reported. DOE (1) clarified the responsibilities of program offices and contractors for terminating clearances they requested by revising DOE order 5631.2A and by modifying the contract closeout checklist to include termination of clearances, (2) requires annual recertifications of federal agency and contractor clearances, and (3) uses a computer comparison of security and personnel files to identify terminated or transferred DOE employees whose clearances should be terminated or downgraded.

Richland

Promptly terminating clearances is a more complicated undertaking for Richland than for headquarters. Richland maintains its 16,000 clearances on its own clearance data base and also on the CPCI. Two events were occurring that allowed clearances to remain active when they should have been terminated: (1) the contractors and local DOE offices did not notify the Richland clearance branch of needed terminations and (2) Richland did not notify headquarters of needed terminations.

Richland identifies accuracy problem and acts to correct—The Personnel Security Branch Chief, who assumed the position in 1984, determined in early 1986 that the Richland clearance data base, called the SEC, and the CPCI did not accurately reflect the currently active clearances at Richland. The files were not current, according to the Branch Chief, because prior to 1985, the branch lacked the staff to enter data to these two independent computer systems. As a result, a 6-month to 2-year backlog of data entries existed.

Richland took several important steps to correct these problems. It hired a contractor in 1985 to eliminate the data entry backlogs on both data bases. The contractor eliminated the backlog on the SEC by April 1986, and on the CPCI by August 1986, according to Richland. In addition, in 1985, Richland revised the annual audits of contractor personnel security activities to include testing the completeness and accuracy of contractor data bases.

In February 1986, the Director, Safeguards and Security, also requested all eight Richland contractors to reconcile their security files to the SEC and to report all corrections to him by March 1986. All contractors

responded indicating they had performed complete reconciliations. The Director repeated this process in January 1987 and the contractors replied by April 1987 that they had completed their reconciliations.

Contractor reconciliation is not complete—In spite of these assurances, the reconciliation for at least one contractor was not complete. A Richland Security Branch auditor identified clearances at one contractor that should have been terminated, but did not report them to the Clearance Branch so that such clearances could be terminated. We identified other clearances at the same contractor that should have been terminated at Richland. Clearance officials at Richland were not aware of these problems.

In August 1986, a Richland clearance branch auditor compared the Rockwell clearance files of one of Richland's contractors (Rockwell) and Richland clearance files. The auditor found a 16-percent error rate on the Richland data base—16 of 100 cases sampled should have been terminated on Richland's files, but were not. This error rate existed despite Rockwell's efforts to reconcile its files with Richland. The auditor did not notify the Richland personnel clearance office because, he said, the contractor was working to correct the problem.

In October 1986, we asked Richland and three contractors to verify three samples of computerized comparisons we made of the field office's clearance files and those contractors' payroll files. This comparison showed two contractor files to be generally consistent with Richland's, but inaccuracies existed between the Rockwell and Richland clearance files. By comparing Richland's clearance file of 6,000 Rockwell clearances against the Rockwell payroll file, we identified about 950 clearances for which our comparison could not verify a continued need. We randomly sampled 50 of these 950 clearances and found that 12 should have been terminated on the Richland file. On the basis of this sample validation, we estimated that at least 105 of the 950 clearances may be clearances that were terminated at Rockwell and which should also be terminated at Richland.¹

As of May 1987, the Chief, Personnel Security Branch at Richland, was not aware that the field office and Rockwell files were still not reconciled. He said he relied on Rockwell's March 1986 and April 1987 letters which he interpreted as saying that the reconciliations were complete and that the files were accurate.

¹Estimate is based on the lower bound of a 95-percent confidence limit.

As a result of our discussion with Richland and Rockwell personnel, a Rockwell security official provided Richland information confirming that Rockwell had not completed either the February 1986 or January 1987 reconciliations. Rockwell said that they had been performing reconciliations nearly continuously since February 1986 and that, as a result, the rate of clearance errors identified in their continuing reconciliation efforts had dropped to about 5 percent. According to Richland, this compares to a 1 percent error rate reported by other contractors.

Following the above discussions, on May 28, 1987, the Richland Director, Safeguards and Security Division, wrote to the general manager of Rockwell Hanford Operations requesting a certified reconciliation of the clearance files by June 15, 1987. The Director stated in the letter that

"... during several recent meetings with the General Accounting Office on the results of their Personnel Security audit, we became aware that Rockwell may have not completed a true reconciliation as reported.

As a result of our inquiries to members of the Rockwell Security office, your letter of May 20, 1987, (reference 6) was provided which confirms that the Rockwell responses in March 1986 and April 1987 on the subject reconciliation were misrepresentations of significant issues."

On June 12, 1987, Rockwell notified Richland that it had performed a complete reconciliation between June 1 and June 10, 1987, and that identified errors had been corrected.

Reasons for and consequences of discrepancies between contractor and Richland files—Several reasons exist for the discrepancies between the Rockwell and Richland files, according to Rockwell and Richland clearance branch staff.

According to a Rockwell personnel security official, Rockwell has inadvertently filed some employee termination statements in its employees' personnel security files instead of forwarding the statements to Richland. (The official did not know why the termination statements were not forwarded to Richland.) Consequently, Richland retained these terminated clearances as active clearances in the SEC and CPCI data bases.

Rockwell officials did not always notify Rockwell's personnel security staff when escorts (part-time employees) and vendors (non-employees) with clearances terminated their relationships with Rockwell. As a result, Rockwell's security staff did not terminate the clearances on its

files and could not notify Richland to terminate such clearances. Therefore, such terminated escorts and vendors continued to be shown as active clearance holders on the contractor, the SEC, and CPCI data bases. Rockwell is currently purging its outdated vendor and escort security clearances and informing Richland of these terminations, according to a Rockwell security official.

In a somewhat related situation, Rockwell personnel security staff sometimes intentionally delayed submitting security termination statements to Richland for terminated vendors and escorts, according to a Rockwell official. Instead, they kept such clearances in a clearance pool, thinking they might be needed again in the near future. According to a Rockwell official, Rockwell security then forgot to terminate these clearances and they were maintained as active clearances at Rockwell and at Richland for years. As this situation demonstrates, maintaining pools of cleared employees can create special problems that require extra precautions to ensure that clearances are properly terminated.

In other cases, according to a Rockwell personnel security specialist, Richland issued security clearances which Rockwell requested for job applicants whom Rockwell never hired. Richland maintained their clearances because Rockwell did not forward security termination statements as required.

Rockwell was replaced by Westinghouse Hanford Operations on June 29, 1987. To ensure that similar discrepancies do not recur, Richland directed Westinghouse to conduct an internal review of clearance processing procedures and report its results to Richland. In its July 27, 1987, report, Westinghouse concluded that adequate procedures were not in place and set out six actions it had initiated to ensure the accuracy of its clearance files. In addition, Richland plans to conduct another clearance reconciliation between contractor and field office clearance files in the fall of 1987.

Discrepancies remain between Richland and CPCI files—Richland also experienced problems with its files and the CPCI files. That is, Richland terminated clearances and removed them from its files but did not terminate such clearances in the CPCI files. In the spring of 1986, Richland had its computer service contractor staff enter these terminations into the CPCI file. The backlog of unterminated clearances developed because, Richland officials said, prior to 1985, it did not have staff to enter these transactions in the CPCI, and Richland's automated clearance system does not automatically transmit information to the CPCI. However, with

some changes to the system, such transmissions could be done. Instead, the data must be separately entered to each system. During the summer of 1986, Richland terminated about 2,000 clearances on the CPCI; more than 1,300 were over 6 months old.

As recently as October 1986, Richland officials assured us that these terminations had made the SEC and CPCI files as accurate as they could be. Such was not the case. On May 12, 1987, we completed a computerized comparison of the CPCI and the Richland clearance file and found 1,155 cases out of 16,000 that were active on the CPCI for Richland but did not show up as active at Richland. We verified a 20-case sample with Richland and found that 18 of the 20 clearances should not have been active. On the basis of this validation, we estimate that at least 800 of the 1,155 cases may need to be terminated.²

One reason why these errors could exist is that in 1986, Richland began requiring its contractors to reconcile their clearance files with Richland's. However, Richland had never reconciled its file with the CPCI. The problem started in 1981 when the field office established its own automated clearance file because it considered the CPCI to be antiquated and difficult to use. At that time, Richland did not reconcile its data base with the CPCI to ensure that it at least started off being consistent. In addition, updating the CPCI has had a low priority for Richland because it does not use the CPCI, Richland officials said. However, Richland promptly began reviewing the 1,155 cases we identified and by July 9, 1987, had made the needed corrections. Although Richland did not keep detailed track of how many or what kinds of corrections were made, it found clearances that should have been terminated long ago, according to a Richland official. The oldest of these should have been terminated in 1953, according to a computer service contractor representative at Richland. To ensure that similar errors are quickly corrected in the future, Richland said it would reconcile its file to the CPCI annually.

Albuquerque

Albuquerque's clearance system controls 51,000 clearances and has accuracy problems similar to those at Richland, but Albuquerque has made even less progress in correcting them. Both the Albuquerque clearance data base and the CPCI contain clearances that Albuquerque should have terminated.

 $^{^2}$ Estimate is based on the lower bound of a 95 percent binomial confidence limit.

In the summer of 1986, Albuquerque began reconciling its contractors' clearance data bases to its own data base. It began the process by sending each of its contractors a list of clearances which the Albuquerque data base listed as active for that contractor. Albuquerque asked each contractor to validate the list against its files. The contractors returned the lists to Albuquerque in the fall of 1986 with about 3,500 discrepancies, according to Albuquerque security officials. For example, the Los Alamos National Laboratory list contained 34 pages of discrepancies, including 123 cases that should have been terminated. As of May 1987, Albuquerque had not corrected the discrepancies because staff were not available, according to Albuquerque officials. Albuquerque was not able to tell us how many cases from the verified lists should be terminated on their clearance file.

In addition to the problems between the contractors and Albuquerque, the CPCI lists active clearances for Albuquerque that the field office does not show as active. In October 1986, we did a computerized comparison of the CPCI and Albuquerque files and found that the CPCI listed 5,600 files as active at Albuquerque which Albuquerque did not show as active. We validated a 30-case sample of these with Albuquerque, which identified problems with 26 of the cases. Of the 30 cases, Albuquerque found (1) 16 were active on the CPCI, although Albuquerque showed them as terminated; (2) Albuquerque had no record for 9 others that were on the CPCI; and (3) 1 had an incorrect social security number, which caused it to incorrectly appear as a case that should have been terminated. On the basis of our validation, it appears that at least 3,800 of the 5,600 Albuquerque clearances in question should be terminated. In August 1987, we gave headquarters, at their request, the 5,600 clearances in question and they began deleting them as appropriate.

Oak Ridge

Our review of the 41,000 Oak Ridge clearances listed on the local Oak Ridge file and on the CPCI was much less extensive than the review we performed at Richland and Albuquerque because of time and staff constraints. Specifically, we did not use a computer program to test the accuracy of either the Oak Ridge clearance data base or the CPCI listings for Oak Ridge. However, during limited discussions with Oak Ridge officials and reviews of internal reports, we identified problems with the field office's clearance file.

³Estimate is based on the lower bound of a 95 percent binomial confidence limit.

Oak Ridge uses three techniques to monitor its clearance data base and identify clearances that should be terminated. These are (1) the reinvestigation program requirement to validate clearances, (2) reconciliations between the Oak Ridge and contractor files, and (3) internal surveys and audits. The reinvestigation program is identifying clearances that should be terminated but the clearance branch has no data on how many such clearances exist. Use of the reinvestigation technique is hampered because the program is far behind in performing needed reinvestigations. In our recent report on DOE's reinvestigation program,⁴ we noted that Oak Ridge had a backlog of 30,000 reinvestigations and needed to do 6,000 to 7,000 a year through 1991 to catch up, but was only doing 2,400 in 1985 and 1986.

Oak Ridge has been sending contractors lists of clearances which the Oak Ridge data base shows as active for those contractors, according to Oak Ridge officials. The officials said they send the lists to contractors on a monthly basis. However, Martin Marietta, which has an automated clearance data base, verifies parts of its data base with Oak Ridge from time to time. The contractors then are required to reconcile the data and report needed changes to Oak Ridge. Oak Ridge had no documentation of the lists it sent to the contractors or the results of these reconciliations. However, an official pointed out that Rust Engineering, which has about 3,000 clearances, never responded to these reconciliation requests so Oak Ridge stopped sending them lists in 1982. Consequently, Oak Ridge has no assurances since at least 1982 that clearances listed for Rust Engineering are accurate.

Oak Ridge's failure to obtain reconciliations from Rust is an important oversight. The Oak Ridge Technical Inspections Branch conducted one of the internal surveys that Oak Ridge used to assess the accuracy of clearance files. Its March 1987 draft—the final report had not been issued by September 1, 1987—reported that Rust Engineering, which does work for DOE and other organizations, maintained a reserve workforce—often called a pool—of 778 Q cleared individuals representing 17 crafts from which it hires people as needed for various construction jobs. The Inspections Branch checked 208 of these and found that 154 (74 percent) appear to have left the contractor's employment from 1 to 15 years ago but the contractor had not notified DOE or submitted the

⁴Nuclear Security: DOE's Reinvestigation of Employees Has Not Been Timely (GAO/RCED-87-72; Mar. 1987).

required clearance termination forms. According to the report, the contractor used the pool as a place to keep terminated employees—even those discharged for excessive absence or tardiness.

The Inspections Branch report noted that the Oak Ridge Construction Division Director appears to have authorized the contractor, in a letter dated March 31, 1985, to maintain the pool in spite of DOE's regulations prohibiting pools. The report further concluded that there was no evidence that Rust was implementing measures for controlling the pool, even though the Construction Division required such measures. As an example of where controls were lacking, there was no evidence that the contractors had ever checked the pool to determine whether those in it were still available to work or even whether they were still alive.

Although we did not attempt to identify differences between the Oak Ridge and CPCI data bases, an Oak Ridge official told us they never reconciled the Oak Ridge clearance files with the CPCI. Without at least periodic reconciliations, Oak Ridge cannot be sure that its clearance files are accurate.

Clearance Files Do Not List Some Clearances That Should Be Active

In some situations at the Albuquerque and Richland field offices, employees had clearance badges that allowed them access to classified information and facilities, but the field offices did not list active clearances for these people. For example, in the reconciliation that Los Alamos conducted with the Albuquerque clearance file, it identified about 620 employees and vendors who had properly obtained clearances, had badges, and were working but who did not have an active clearance listed at Albuquerque. Further, according to a Richland computer service contractor, the Rockwell contractor also identified employees—fewer than 100—who had clearance badges but no active clearances.

Not having active clearances listed on the Albuquerque and Richland files raises security concerns. These persons never come up for reinvestigation because the DOE field offices, which draw up the reinvestigation lists, do not list the clearances as active, according to an Albuquerque official who identified these problems.

Clearance Data Bases Have Errors and Are Missing Data

The clearance data bases at both the field offices and at headquarters contain data errors or omissions other than those related to whether specific clearances should be active. For example, Los Alamos reconciled its data base with Albuquerque's in September 1986. It identified over 1,000 errors which, in addition to unterminated clearances, included a range of errors such as unrecorded name changes, inaccurate clearance identification numbers, conflicting clearance levels, and inaccurate clearance file locations. We found similar errors at Richland where the reconciliation with Rockwell had not been completed. However, as of June 12, 1987, Rockwell certified to Richland that its files had been fully reconciled to Richland's.

In addition to these errors, a large number of clearance files do not contain social security numbers. For example, 134 of 737 (18 percent) Sandia files; 230 of 1,772 (13 percent) Los Alamos files; and 1,103 of 2,636 (42 percent) Richland files that we looked at had no social security numbers. The DOE Inspector General reported in July 1986 that the CPCI did not list social security numbers for 1,500 headquarters employees. Headquarters has subsequently added social security numbers to hundreds of clearance records and is continuing efforts to correct this problem.

In addition to missing social security numbers, the CPCI also contains incorrect social security numbers. In April 1987, we compared the social security numbers of CPCI clearance holders for Albuquerque and Richland with the Social Security Administration's list of valid numbers. For 2,564 of about 60,700 cases (about 4 percent) the listed social security number did not match the Administration's records.

Data Base Problems Contribute to Errors

At the three field offices we reviewed, problems inherent in the multilevel clearance data base system have increased the impact of the more basic problems contributing to clearance data inaccuracies. For example, the requirement for redundant data entry at Richland, the cumbersome updating requirements of the CPCI, and the obsolete error checking at Albuquerque have all worsened the impact of staff shortages.

Redundant Data Entry Impedes Updating

In 1981 Richland activated its SEC clearance data base, but did not provide an automated link between the SEC and the CPCI. Consequently, updates made to the SEC must be manually duplicated for entry to the CPCI. Richland officials realized in 1985 that entries to the SEC and CPCI

were backlogged for 6 months and 2 years respectively, and they attributed the backlog to inadequate staff. However, the impact of the staff shortage on the backlog was exacerbated because each system had to be separately updated and separately corrected. According to DOE head-quarters security branch officials, they would like to see the SEC and CPCI directly connected but they cannot require Richland to make the change.

Cumbersome Updating Requirements Impede Updating

Two CPCI features work together to complicate field office efforts to update CPCI data for their offices. First, the CPCI is updated through a process that updates all transactions of a period during one operation without a data entry person being able to work on each file separately. In addition, the CPCI requires events in the clearance process to be entered in the order in which they occur. Several dates cannot be entered at once—if they are, an error is generated. Consequently, as Richland and Albuquerque worked to update files for which several events had not been entered, they had to repeatedly reprocess many files to correct them event by event. A more modern process that allows direct individual updates could make the update process simpler.

Obsolete Error Checking Increases System Errors

Albuquerque automated its clearance files in about 1968. However, the Albuquerque data base has not kept pace with technology. Until recently, it had no error checking to eliminate errors before updating clearance information to the CPCI. While it recently added error checking, the error checking is not fully efficient because Albuquerque's data base equipment is obsolete. Consequently, Albuquerque submits 350 to 500 errors at a time (which must be corrected and resubmitted) to the CPCI, according to an Albuquerque official. In one weekly reporting period Albuquerque had a 50 percent error rate—1,096 of 2,187 transactions were errors. Correcting these errors puts an added drain on Albuquerque's clearance staff.

DOE Is Considering Improvements to CPCI

DOE headquarters is studying whether the CPCI should be upgraded to a system where updates can be made directly as they are received by a clearance office and whether such a system would serve all DOE field offices. Such a system would eliminate the need for independent systems such as those at Albuquerque, Oak Ridge, and Richland. Current indications are that existing headquarters computer equipment is adequate for all field offices and the added cost of incorporating Albuquerque, Oak Ridge, and Richland in the system would be minimal.

Under such a system, data would be entered once, eliminating double data entry and the possibility for adding errors, which the existing process creates. It would also ease the data entry process and allow all locations to benefit from the data entry error checking capability available in the CPCI.

Conclusions

The automated data bases which DOE uses to maintain control of active security clearances have major shortcomings. The field office clearance data bases contain hundreds of clearances that should be terminated, and Albuquerque and Richland do not contain clearances that they should. Beyond that, the CPCI also shows as active thousands of clearances that should have been terminated—some many years ago—and does not contain others that it should. Files at DOE/HQ and at the field offices also contain a variety of data errors and are missing other data elements such as social security numbers which provide a basis for automated clearance validations.

The data inaccuracies exist for a variety of reasons. The DOE Inspector General reported that at headquarters DOE program offices and contractors have not notified the DOE headquarters security branch when clearance holders terminated their association with DOE and no longer needed their clearances. We found similar situations at the field offices. In addition, even when the field offices were notified of clearance terminations, they often did not have staff to record the terminations.

The clearance accuracy problems have been exacerbated by DOE's multiple automated data bases, which communicate poorly with each other. Richland, for example, must enter data on its own data base and again on the CPCI, and Albuquerque's obsolete error checking system fails to weed out errors, making added work for its staff to correct. In addition, contractors maintain their own clearance files, thus creating a third level of independent clearance files—all of which DOE eventually pays for.

In addition, management problems exist. Doe's decentralized management structure does not provide headquarters security branch officials direct authority over the field offices other than by issuing Doe Orders. The headquarters clearance office generally acts as an advisor to field offices on their clearances matters. Consequently, headquarters cannot require all field offices to (1) use the CPCI rather than proliferating their own systems, (2) have automated data entry from field office systems to the CPCI, or (3) have fully compatible error-checking. Furthermore,

before 1986, the field offices that we reviewed neither conducted initial reconciliations when initiating new systems nor performed periodic reconciliations of their files with headquarters files or their contractor's files.

As a result, the various clearance files overstate the number of clearances for which DOE and each office is responsible, while not including others for which they are responsible. This complicates management of other clearance functions such as the reinvestigation program because without accurate data DOE can determine neither the number of cleared employees needing reinvestigation nor when reinvestigations are needed. Furthermore, data bases listing employees as having active clearances even though they should have been terminated pose a potential security concern because one of DOE's ways to prevent unauthorized access to classified information and facilities is compromised.

Recommendations

To ensure a reliable and efficient security clearance data base, we recommend to the Secretary of Energy that DOE

- validate the accuracy and completeness of its security clearance data base from the contractor files to the CPCI and develop appropriate updating techniques to ensure they remain current; and
- determine whether one DOE data base, properly maintained, can serve all DOE clearance needs, including those of its contractors, rather than keeping the current multi-layered system.

DOE Needs to Reduce Clearances

Since December 1985, DOE has recognized that many DOE and contractor employees have higher level and more clearances than needed. At that time, a DOE task force to improve security at DOE facilities identified as one reason for overclassification DOE's failure to grant each clearance on a case-by-case basis, based on the specific clearance level required to perform a job; DOE regulations require this process.

Although the task force recommended ways to reduce clearances, headquarters was slow in requiring clearance offices to implement these or other steps, and clearance staffs carried out clearance reduction actions at their own discretion with varying levels of effectiveness. DOE has paved the way for reducing Q sensitive clearances to Q nonsensitive by revising the clearance order, but the number of actual reductions from this step and others is still small.

On June 9, 1987, DOE issued new direction to clearance offices to reduce clearance levels and numbers as a first step in developing a plan for meeting DOE's requirements for reinvestigating cleared employees at 5-year intervals. These directions, if aggressively implemented, could lead to substantial reductions in the numbers and levels of DOE's clearances.

DOE's Clearance Regulations Are Not Being Followed

In December 1985, the Personnel Security Program subgroup of DOE's Cerberus Task Force sent a discussion paper to all field offices pointing out its conclusion that clearances were granted for reasons not consistent with regulations and that, as a result, DOE had more and higher level clearances than it needed.

Specifically, the subgroup noted that many DOE employees had higher level clearances than they needed to perform their duties. As an example, it noted that 49 percent of then-current DOE employees possessed a Q sensitive clearance and that many of them could accomplish their duties with a much lower level clearance. They had Q sensitive clearances because headquarters employees are routinely processed for that clearance.

Similarly, contractor employees were also overcleared, the subgroup noted. According to the group, some DOE facilities have arbitrarily adopted a policy of requiring all employees to possess a DOE Q nonsensitive clearance even though their duties do not require access to classified data or nuclear material of a type and quantity for which the Atomic Energy Act requires a clearance. This policy was enacted to alleviate the facility from having to compartmentalize classified from

unclassified work or to assure that a cadre of cleared personnel was kept available for use on whatever classified work was assigned to the site, the subgroup said.

Three of the seven contractors we reviewed also made individual clearance requests on the basis of a general policy rather than the individual determination of access needs as required in DOE Order 5631.2A; DOE granted these clearances. For example, Rust Engineering requests Q clearances for all union employment prospects and the Los Alamos and Sandia Laboratories request Q clearances for virtually all their employees. These contractors request these high-level clearances, according to contractor officials, partially based on security needs but also to assure the future availability of employees for work requiring a Q clearance. Contractors also request clearances as a way of avoiding such potential employee relations problems as litigation in hiring and promotion cases where clearances could be an issue. Requesting clearances for these reasons is not consistent with the DOE Order.

DOE and Contractors Are Not Aggressively Reducing Clearances

In December 1985, the Cerberus Task Force recognized that over-clearance was a problem throughout DOE and discussed several recommendations to reduce clearance levels and numbers. However, DOE did not then require that these recommendations be implemented.

The task force recommended reducing the numbers and levels of clearances by, among other things

- having the field office facilities allow access to employees wearing badges marked "building access only," rather than requiring Q and L clearances when only building access and not information access is required;
- compartmentalizing areas to separate classified from unclassified work at DOE contractor locations; and
- reviewing employee clearances to ensure that employees have clearances directly related to the classification level of the information to which they need access.

Although the headquarters and field clearance branches, at their May 1986 personnel security conference, recognized the need to reduce clearance numbers and levels, clearance staffs carried out clearance reduction actions at their own discretion with varying levels of effectiveness for the next year. After the 1986 conference, the Acting Chief, Headquarters Personnel Clearance Branch, began preparing a letter from the

Assistant Secretary for Defense Programs to all field offices, setting out the actions that should be taken to reduce the numbers and levels of DOE's clearances. The Acting Chief said the letter was supposed to be issued in October 1986 but it was not issued until April 9, 1987, because of various revisions, thus delaying instructions to headquarters and the field offices.

Each field office has made some progress towards achieving important reductions. However, these have generally been easily made reductions from Q sensitive to Q nonsensitive or L. The reductions are easily made because the Q sensitive clearance has little impact on access to most classified information, material, or facilities and because the September 1986 revision of the clearance regulations tightened the requirements for a Q sensitive clearance in such a way that it essentially precludes contractors and all but high-level doe employees from having such clearances. For the most part, only those who affect the policy direction of a program now qualify for a Q sensitive clearance; contractors and lower-level doe employees should not normally be in a position of setting doe program policy.

Headquarters

Headquarters has taken several steps to reduce the numbers and levels of clearances for its federal and contractor employees. Headquarters has long used building access badges to hold down the number of clearances it grants. It began issuing building access badges to federal employees in 1977 and to contractor employees in 1983. Headquarters now has 4,058 active building access badges, according to the Chief, Headquarters Personnel Security. Without access badges, these employees would have needed clearances. However, a May 4, 1987, DOE Inspector General report pointed out that 83 percent of the 1,100 headquarters cleared employees it sampled had clearances higher than they needed. Earlier, a July 9, 1986, Inspector General report concluded that clearances were not promptly terminated. Responding to these reports and on their own initiative, headquarters clearance officials have taken several steps to reduce clearances, including the following:

- established an automated system for DOE federal employees to identify, among other things, when employees are transferred to offices where a lower level clearance might be appropriate.
- established and implemented for the first time an annual reconciliation
 of the CPCI by each headquarters unit and contractor organization along
 with determining if clearances are still needed and/or their level should
 be lowered.

A headquarters security official reported that as of May 29, 1987, 581 of its approximately 12,200 clearances had been lowered—most were from the Q sensitive to the Q nonsensitive level.

Albuquerque

The Albuquerque field office is not taking any specific steps to reduce the number and level of clearances other than reducing clearances from Q sensitive to Q nonsensitive. Albuquerque identified 2,600 Q sensitive clearances that could be reduced and has begun downgrading them. An Albuquerque official said the field office plans to complete the downgrading by about December 1987.

Furthermore, Albuquerque cancelled an initiative it began in May 1986. In that initiative, Albuquerque asked its Internal Review and Evaluation Division to examine whether a restructuring of the field office and its contractors would reduce the number of employees requiring Q and L clearances. The requests were cancelled because the internal review office needed security division staff and the division had no staff to spare, according to the Director of Security.

Oak Ridge

Oak Ridge has taken several steps to reduce clearance numbers and levels, but the success of these steps in achieving clearance reductions has been uneven. For example, in December 1985, the Oak Ridge Director of Safeguards and Security sent letters to two does divisions and three contractors transmitting the preliminary findings and recommendations of the Cerberus Task Force concerning clearance reductions. While he asked the addressees to review and comment on the findings and recommendations, he did not require steps to reduce clearances. Of the two contractors we looked at, Rust Engineering and Martin Marietta, one has taken steps to reduce clearances and one has not.

Rust Engineering representatives said they do not remember Oak Ridge asking them to reduce clearances and they have done nothing to reduce them. The other contractor, Martin Marietta, established a performance improvement program to look at several security issues including reductions in the numbers and levels of clearances. While Martin Marietta management said safeguards and security concerns precluded efforts to reduce the number of Q cleared employees at the Y-12 complex, it was able to separate employees from Oak Ridge National Laboratory who work in the northeast end of the Y-12 complex, and thereby reduce their clearance level. Martin Marietta said it reduced 583 Q clearances to L clearances, thus saving an estimated \$160,000 in annual clearance costs.

In addition, Martin Marietta terminated about 1,100 clearances for nonemployees such as vendors and subcontractors.

Oak Ridge also began an effort to consider compartmentalizing the federal building but has made little progress toward accomplishing compartmentalization. In the summer of 1986, Oak Ridge created the Space Management Plan Implementation Group to implement the recommendations in the June 1986 Long Range Space Management Plan. The plan was developed by the Space Management Plan Development Committee and its purpose was to provide long-term solutions to DOE/OR's space problems. Although the implementation group created a subgroup to study compartmentalization, the development committee decided, on August 19, 1986, that it should not develop compartmentalization proposals, but should be prepared to react to such decisions developed elsewhere. On December 1, 1986, the Oak Ridge Assistant Managers for Administration and Defense Programs directed the implementation subgroup, as a first step in the compartmentalization process, to analyze the costs and benefits of compartmentalization. By September 2, 1987, a draft analysis was being reviewed, but no clearance reductions had been taken.

Another Oak Ridge contractor, Boeing Petroleum Services, has taken steps to reduce clearances. It conducted a review of the sensitivity of positions at the Strategic Petroleum Reserve and reduced the number of sensitive positions by 740. This reduction creates the framework for proportionate future reductions in clearances.

In December 1985 the Richland manager initiated several steps aimed at reducing the numbers and levels of clearances. Richland security officials said these steps are beginning to have a positive impact but they do not have data to quantify the results.

Following the December 2, 1985, Cerberus Task Force report, the manager, Richland requested all eight of its contractors to review the security responsibilities of its Q and L cleared employees and to report to him by March 1986 on those whose clearances could be lowered. Although the contractors identified 1,078 of its almost 15,000 clearances active as of August 1986 as candidates for reduction, by March 1987, Richland had documented reductions of 267 of these clearances. According to Richland officials, more clearances have been lowered and others have been issued at lower levels but they have not maintained a count.

Richland

The manager, in December 1985, also requested the contractors to prepare and forward plans where appropriate for converting areas that require a clearance to gain access to an area not requiring a clearance. As of May 1987 the contractors had converted three clearance areas to nonclearance areas. Although Richland officials did not know the number of security clearance reductions that resulted from these actions, they said they knew reductions had occurred.

Also, on August 29, 1986, the manager issued an order (DOE Order 5631.3) requiring contractors to annually review their employees' security clearances and adjust them to the minimum level required.

More and Higher Level Clearances Than Needed Increase DOE's Security Costs and Decrease Security

Reducing clearance numbers and levels can decrease clearance costs because obtaining and reinvestigating any clearance entails costs which increase sharply as the clearance level increases. Table 5.1 shows the fees doe pays other organizations for the investigations needed to obtain and reinvestigate clearances, as well as the cost to obtain a "building access only" badge. As the table shows, lowering a clearance from a Q nonsensitive to a secret or L or to an "access only" badge can save \$635 per clearance in reinvestigation costs and \$1,835 when current clearance holders are replaced.

Table 5.1: Clearance and Reinvestigation Costs

Туре	Initial Clearance	Reinvestigation
Q sensitive	\$2,300	\$2,300
Q nonsensitive	• 1,850	650
Top secret	1,850	650
Secret	15	15
L	15	15
Access only	15	15

Reducing clearance numbers and levels can also tighten security because it reduces the number of people with potential access to classified information and material. The need for reducing clearances has been frequently recognized in recent congressional hearings and in various studies of security concerns as an important step toward improving security.

Conclusions

In December 1985, a subgroup of DOE's Cerberus Task Force wrote to all DOE clearance offices concerning how clearance processing times could

be reduced. It said that DOE and contractor employees at the field offices and at headquarters had more and higher-level clearances than needed. The subgroup said that if the clearance numbers and levels could be reduced, the clearance staff work load would be reduced and thus clearance processing could be accelerated.

The subgroup pointed out that excessive clearance numbers and levels exist because, for example, many headquarters employees were processed for Q sensitive clearances when a much lower level of clearance would have sufficed. Further, some DOE facilities have arbitrary policies of requiring all employees to possess Q nonsensitive clearances even though the employees do not require access to Q level classified data or material. Three contractors at two of the field offices we reviewed have similar policies granting virtually all employees Q nonsensitive clearances. These actions are not consistent with DOE's clearance orders, which require that each clearance be granted on a case-bycase basis and limited to the lowest level of access required.

Maintaining more and higher levels of clearances than are needed creates undue security risks because over-cleared individuals may have access to information classified at a higher level than they need. In addition, higher than needed clearances incur unneeded costs—a Q nonsensitive clearance investigation costs \$1,850 compared to \$15 for an L clearance, and clearance processing for higher level clearances requires more clearance staff resources.

The Cerberus subgroup, in its December 1985 discussion paper, also suggested a number of initiatives for discussion that could reduce clearance numbers and levels, but does did not require that these initiatives be acted on. In the spring 1986 Personnel Security Conference, does's security officials agreed that guidance on clearance reduction steps should be developed for issuance in October 1986 by the Assistant Secretary for Defense Programs. The guidance was not issued until April 9, 1987. It called for field offices to (1) implement the more stringent criteria adopted by the does Order in September 1986 for obtaining a Q sensitive clearance, and (2) examine the clearance level needed for all cleared employees.

Since December 1985, does have made progress in initiating actions that may reduce the numbers and levels of clearances, but only small reductions have been accomplished so far. It is important to note that eliminating active clearances for individuals no longer associated with does is

an important but different issue from correcting situations where current employees are overcleared.

As one step to control clearance levels, headquarters began issuing "building access only" badges for DOE employees in 1977 and for contractors in 1983. Consequently, over 4,000 individuals who would have had clearances and potential access to classified information if all employees required a clearance, now have "building access only." For federal buildings at the offices we visited. Richland also adopted such a system after over a year (during which it was awaiting funds), while Albuquerque and Oak Ridge have not. None of the field offices have actively promoted and achieved success with contractor programs to compartmentalize work areas. Headquarters has also adopted an automated program to identify clearances that should be downgraded. All offices are taking steps in response to the September 1986 change in the requirements for Q sensitive clearances to identify clearances that could be downgraded from Q sensitive to Q nonsensitive, but only headquarters could provide data on reductions achieved—581 Q sensitive clearances reduced to Q nonsensitive or L clearances. Albuquerque and Oak Ridge have identified about 2,600 and 740 clearances that could be downgraded.

In response to recommendations in our March 10, 1987, report on DOE's reinvestigation program, the Under Secretary tasked the Assistant Secretary for Defense Programs and the Assistant Secretary for Management and Administration to direct headquarters and each field office to develop plans to meet departmental reinvestigation targets. The Assistant Secretary for Defense Programs conveyed these directions to DOE's field office managers on June 9, 1987, and pointed out that reductions in the numbers and levels of clearances is one security issue that must be pursued. The Assistant Secretary for Defense Programs also made the Director, Office of Safeguards and Security, responsible for monitoring implementation of the plan and reporting his results annually to the Assistant Secretary for Defense Programs.

We concur with the Assistant Secretary for Defense Programs and with the Cerberus Task Force that DOE should reduce the numbers and levels of clearances at its facilities. If reductions are achieved, they will enhance the control which clearances provide over access to information, reduce clearance costs, and free clearance staff for other clearance functions. However, similar directions to reduce clearance numbers and levels have been issued in the past and, according to security officials, progress in achieving reductions has been slow.

Given the importance of reducing clearances and the slow progress DOE has made in response to previous guidance to reduce clearances, we believe that it is particularly important for the Under Secretary and the Assistant Secretary for Management and Administration, the officials who initiated the current guidance, to carefully monitor DOE's clearance reduction efforts to ensure that all offices are devoting adequate attention and resources to eliminate unneeded clearances.

DOE is not fully complying with its regulations, which require that it ensure that only those who need access to classified information have such access. As pointed out in the previous two chapters, DOE is not ensuring that only those currently associated with DOE have clearances, that only those currently associated with DOE who need a clearance have one, and that clearance holders have the lowest clearance that provides the access needed to perform their jobs. Beyond that, the training DOE provides its employees does not adequately assure that employees will take proper steps to ensure that those with clearances will only have access to that classified information specifically required to perform their jobs.

DOE Needs to Ensure Compliance With Its Need-to-Know Requirements

DOE regulations require that it restrict access to classified information to those who have a justifiable need for it, or a "need to know." Assuring need to know is a two-step process. The first step is the initial determination that an individual will need access to classified information in the course of performing his or her job and therefore needs a clearance. The second step is the individual determination that a cleared individual justifiably requires access to specific information. DOE needs to improve its performance in both aspects of need to know.

DOE Needs to Ensure That Its Clearance Order Is Strictly Enforced

Effective implementation of the need-to-know principle through the clearance process requires that DOE effectively implement its clearance regulations. It must ensure that in each case, the clearance level granted is specifically related to the classification level of the material to which access is required. In addition, DOE must ensure that it controls its active clearances so that only those who should have valid clearances have active clearances listed in clearance data bases.

In the previous two chapters, we have pointed out that the clearance, which is the most effective control over access to information, is not being fully and effectively used to provide that control. Many DOE employees have higher level clearances than they need; therefore, they have potential access to higher level information than is justified. In addition, former employees do not have their clearances promptly terminated, and they, in some cases, may have access to information to which they are not entitled. Both situations force greater reliance on individuals making need-to-know determinations—a reliance that may reduce security.

Improved Need-To-Know Training Is Needed to Better Ensure Control Over Classified Information The clearance is the most effective control over who has access to information. After a person is cleared, his or her access depends on how effectively those who possess classified information implement the very loosely defined requirement called need to know. This requirement puts the burden on each person in control of classified information to ensure that a cleared requester also has a legitimate need before providing access. However, the need-to-know requirement is not a fully effective mechanism for controlling access to information among cleared individuals.

The Information Security Oversight Office organized an interagency committee (which included a DOE representative) to review five information security areas—one was the mechanism various agencies use to implement need to know.¹ It concluded in November 1985 that there is widespread indifference to the principle and that the need-to-know principle has eroded to the point that frequent access to classified information is based exclusively on having a security clearance at least at the level of the classified information. Therefore, the task force recommended to the President on November 14, 1985, that he direct the heads of federal agencies to take steps to reinvigorate the need-to-know principle.

While we have not reviewed the effectiveness of individual need-to-know decisions within DOE, the then-Director of Personnel Security told us, in January 1987, that among cleared headquarters employees, need-to-know decisions were not as effective as they should be in controlling information. Our assessment of DOE's regulations and training on how to implement need-to-know requirements shows that DOE needs to improve both.

Regulations Provide No Specific Guidance

DOE Order 5635.1—Control of Classified Documents and Information—covers the need-to-know principle as follows:

"Holders of classified documents or information may release same to other parties only for official reasons and then only after having obtained verification that the intended recipient possesses the appropriate access authorization, and 'need to know' and programmatic approval for special access categories (i.e., weapons data and so forth)."

¹The Information Security Oversight Office is an independent office which derives its authority from the National Security Council and is responsible for overseeing the information security activities of all executive agencies.

The headquarters Chief of Physical Security said no specific guidance exists on how to implement this requirement, such as how to verify need to know or who has authority to make such decisions. Such determinations are now generally made by the individual possessing the classified information that others seek to obtain or share access.

Need-to-Know Training Could Be Strengthened

DOE and its contractors can provide training on need to know through a variety of required training activities, including initial clearance briefings, refresher training, and in various continuing awareness activities, such as poster campaigns. Our review of DOE's and its contractors' need-to-know training showed a wide disparity in the content and comprehensiveness of materials used to present need to know. Furthermore, how to implement need to know was unclear and some training requirements for security awareness were not met.

The quality of materials used to present need to know varies. For example, Richland refresher training tapes that we reviewed covered need to know in 10 seconds but did not explain how it should be applied. At the Los Alamos laboratory, contractor brochures contain clear and detailed guidance on avoiding disclosure of information to uncleared people, but do not describe the need-to-know principle as it applies to cleared employees.

According to a contractor training specialist, DOE could improve need-to-know training by becoming actively involved in establishing training standards and developing course materials and also by assuring that the best training materials developed by contractors are made standard throughout DOE.

In general, need-to-know training material lacks specific instructions on how to establish that a requester has a need to know and who has the authority to authorize access. In some material, the authority appears to reside in any individual, while in other materials, supervisors must approve a need-to-know decision.

Lastly, DOE requires yearly refresher training. This requirement was not being fully met. A Richland contractor provided training on a 3-year cycle because it did not obtain the additional trainers needed to meet a 1-year cycle, according to the contractor's training official. The contractor was replaced on June 29, 1987, and the Chief, Personnel Security

Branch, said the new contractor would be current with the 1-year training requirement by December 1987. Further, the then-Director of Security at headquarters told us, in January 1987, that the training requirement was not always met at headquarters, especially for higher level officials. In August 1987, headquarters implemented a new training program with revised materials, including videotaped security briefings to comply with the 1-year training requirement, according to a headquarters security official.

Conclusions

DOE's regulations require that it restrict access to classified information to those who have a need to know. Implementing need-to-know requirements is a two-step process. In the first step—the clearance process—DOE must ensure that only those currently associated with DOE have clearances, that only those current employees who need a clearance have them, and that clearance holders have the lowest clearance level which provides the access needed to perform their jobs. In the previous two chapters, we pointed out that DOE needs to improve these aspects of the clearance process.

Weaknesses in the clearance process put an added reliance on the second and weaker step in the process for controlling access to information. This step requires that individuals in possession of classified information allow others to have access only after establishing that the recipient has an official need for the specific information. An interagency committee created by the Information Security Oversight Office concluded in November 1985 that federal agencies were not doing a fully effective job implementing need-to-know regulations and must take steps to reinvigorate need to know enforcement. In addition, the then Director of Security at headquarters told us need-to-know regulations were not being implemented as well as they should be at headquarters.

Our review of DOE's regulations and training governing need to know suggest that neither is fully adequate and that both need improvement if the need-to-know principle is to be fully effective. The only existing DOE Order covering need to know provides no guidance on how to make need-to-know decisions or at what level those decisions can be made. Furthermore, security awareness training programs generally do not provide additional guidance.

If DOE is to reinvigorate the need-to-know concept, the first step ought to be to develop a realistic regulation with specific instructions on how individuals should make need-to-know determinations. Two areas that

might be considered would be (1) establishing a realistic level at which the need-to-know decision can be made, and (2) providing guidance on the verification needed for an asserted need to know.

Furthermore, our review of DOE's and contractors' need-to-know training showed a wide disparity in the content and comprehensiveness of materials used to present the principle. Additionally, how to implement need-to-know regulations was unclear and some need-to-know training requirements were not always met. Improvements could be made in need-to-know training by (1) providing more uniform training materials, (2) developing materials that cover all aspects of need to know, (3) providing specific instructions on implementing need to know, and (4) ensuring that training is provided when required.

Recommendations

To improve control of classified information, we recommend to the Secretary of Energy that DOE

- revise its regulations governing the need-to-know principle to establish
 the appropriate approval level for need-to-know decisions and indicate
 how such decisions should be made; and
- revise its security training program to (1) develop more uniform needto-know training materials that cover all aspects of the principle, including specific instructions on implementation, and (2) ensure that such training is provided annually to employees as currently required.

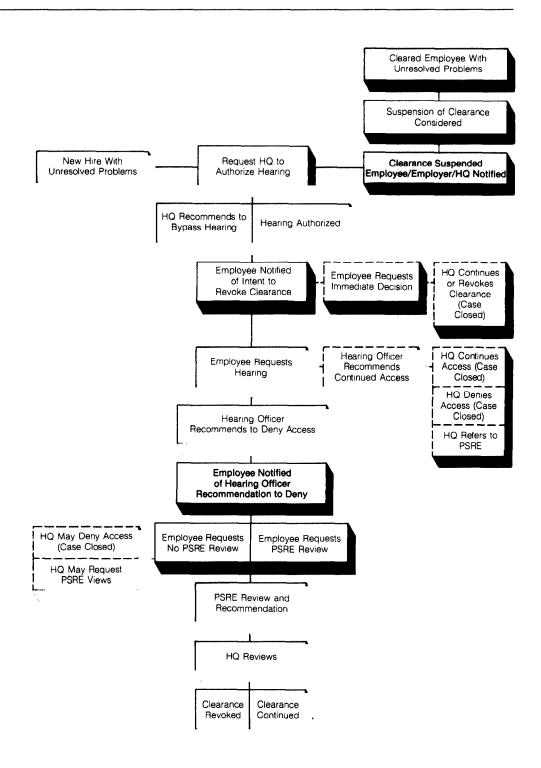
Initial Clearance Process

The process in which a new applicant obtains a clearance includes the following steps.

- The contractor obtains a pre-employment investigation (PEI) to determine an applicant's suitability.
- A determination is made whether the applicant needs a clearance and, if so, at what level.
- The applicant fills out a questionnaire which the contractor submits to DOE.
- DOE obtains a background investigation from OPM or the FBI.
- A DOE clearance office analyzes the case.
- DOE decides whether to grant a clearance.

If the investigation does not identify substantial derogatory information—such as involvement in sabotage, espionage, treason or sedition, financial difficulties, or drug abuse—that casts doubt on the individual's trustworthiness, DOE will grant the clearance. If it identifies such information, it may conduct interviews, psychiatric examinations, and supplemental investigations before deciding whether to grant or deny a clearance.

Administrative Review for New Hire or Cleared Employees



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