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General Accounting Office  
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160600

Resources, Community, and  
Economic Development Division

B-279672

May 8, 1998

The Honorable Joe McDade  
Chairman, Subcommittee on  
Energy and Water Development  
Committee on Appropriations  
House of Representatives

Subject: Department of Energy: DOE Contractor Employee Training

Dear Mr. Chairman:

As requested, we are providing you with information on the training given to Department of Energy (DOE) contractor employees. This is the third in a series of reports you requested regarding DOE's training program. In May 1997, we reported on the training that DOE gives to departmental employees.<sup>1</sup> In June 1997, we reported on the status of DOE's training improvement initiatives.<sup>2</sup> In the near future, we plan to summarize our views on the changes needed to DOE's training program based on preparing these three reports.

DOE provides funding to train contractor employees on a wide variety of subjects. This training is intended to improve such things as managerial expertise, job knowledge, working relationships, and professional development. As agreed with your office, this report addresses (1) DOE contractor employee training costs for fiscal years 1995 through 1998 (see enc. I), (2) the percentage of contractor training courses at selected DOE field locations that the contractors estimated were required by federal and/or state regulations or DOE orders (see enc. II), (3) the length and the cost of specific contractor training

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<sup>1</sup>Department of Energy: Training Cost Data for Fiscal Years 1995 Through 1997 (GAO/RCED-97-140R, May 6, 1997).

<sup>2</sup>Department of Energy: Status of DOE's Efforts to Improve Training (GAO/RCED-97-178R, June 27, 1997).

160600

courses at selected DOE field locations (see enc. III), (4) the performance measures used at selected DOE field locations to evaluate contractor training efficiency and/or effectiveness (see enc. IV), and (5) the actions taken at selected DOE locations to reduce contractor training costs (see enc. V). To respond to the last four objectives, we gathered detailed information on contractor training from four DOE field locations—the Oak Ridge Operations Office, the Richland Operations Office, the Rocky Flats Field Office, and the Savannah River Operations Office. These four locations were selected because their annual expenditures for contractor training are among the highest across the DOE complex.

### SUMMARY

According to departmental data, DOE's spending for contractor employee training has decreased dramatically. For fiscal years 1995, 1996, and 1997, DOE spent about \$465 million, \$390 million, and \$322 million, respectively. DOE estimates that it will spend about \$305 million for contractor training in fiscal year 1998. With these funds, DOE contractor employees have received a wide range of training, from technical courses on nuclear safety and working in radiological areas to nontechnical courses on back care and defensive driving.

The DOE contractors included in our review estimated that the vast percentage of the training they provided to their employees was required by federal and/or state regulations, such as federal occupational safety and health standards, or DOE orders. The percentages ranged from 65.5 percent for the contractor at DOE's Oak Ridge Operations Office to 99.2 percent for the contractor at DOE's Rocky Flats Field Office.

In regard to information on the length and the cost of specific training courses, our comparison of 25 similar courses showed that the courses' length in hours and the cost per classroom hour varied considerably among the contractors reviewed. For example, one course on environmental laws and regulations varied in length from 4 to 24 hours and in cost per classroom hour from \$8 to \$38. As acknowledged by DOE in its 1996 strategic training implementation plan, the independent development of training by its contractors has produced such variations and "resulted in a waste of resources and nonstandardized training across the Department."<sup>3</sup>

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<sup>3</sup>DOE's December 1996 implementation plan for strategic training was issued to improve training and reduce training costs within the Department.

DOE has not developed a set of performance measures to evaluate contractor training departmentwide. As a result, for those contractors included in our review, DOE field locations used various measures for fiscal year 1997 to evaluate contractor training performance. Although DOE's measures could improve data collection and record keeping, for the most part they would not help eliminate unnecessary costs for contractor training or improve training effectiveness.

DOE and contractor officials contacted during this review identified four actions that could reduce contractor training costs:

- Consolidate training operations where multiple DOE contractors or multiple contractor training organizations are present. Such consolidation can substantially reduce costs by eliminating redundant training organizations and redundant training courses. For example, in mid-fiscal year 1994, the contractor at DOE's Oak Ridge Operations Office consolidated contractor training previously being provided by four separate organizations and reported a cost savings of about \$3.3 million the following year.<sup>4</sup>
- Subcontract (i.e., outsource) training courses to qualified vendors. Outsourcing can reduce the cost for providing contractor training. For example, in fiscal year 1997, the contractor at DOE's Rocky Flats Field Office outsourced about 65 percent of its training to a qualified vendor at an estimated savings of more than \$0.6 million for the 2-year period covering fiscal years 1997 and 1998.
- Use training course materials from other DOE locations rather than develop courses independently. The cost avoidance associated with doing this, where feasible, could be measurable. Of the contractors reviewed, we found that the contractors at the Oak Ridge Operations Office, the Richland Operations Office, and the Rocky Flats Field Office use training course materials from other DOE locations whenever possible. However, the contractor at the Savannah River Operations Office makes limited use of training course

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<sup>4</sup>In fiscal year 1996, after consolidating training under Lockheed Martin Energy Systems, a new subsidiary—Lockheed Martin Energy Research—assumed responsibility for managing a part of DOE's Oak Ridge operations. According to the Lockheed Martin Energy Systems' training director, the new subsidiary began offering training to its employees that duplicated certain training that had previously been consolidated. The training director indicated that the two Lockheed Martin subsidiaries operate as separate companies.

materials that have been developed elsewhere. According to the contractor's training manager at that site, the contractor has no policy or procedures requiring it to consider using materials from other DOE locations before deciding to develop a new training course. In fiscal year 1997, the Savannah River contractor spent over \$3.9 million independently developing contractor training courses at that site.

- Standardize the development and the delivery of similar contractor training courses. Our review showed that the delivery cost for certain contractor training courses varied considerably. For example, one course on defensive driving for general employees varied in cost from \$16 to \$49 per classroom hour. Standardization could produce substantial cost savings because many similar training courses are offered by contractors across DOE.

The possibility of implementing these actions may vary, depending on the circumstances at individual DOE sites. Some locations have already begun implementing some of these cost-cutting efforts. For example, in response to the success achieved in outsourcing contractor training at Rocky Flats, the contractor at Richland outsourced about 25 percent of its training in fiscal year 1998, at an estimated savings of about \$2 million over the 3-year term of the contract. However, further consolidation of contractor training may not be possible at some locations because only one contractor is present.

In gathering this information on DOE contractor employee training, DOE advised us that the Department has pursued methods to identify and implement measures to reduce costs for federal and contractor training. DOE indicated, for instance, that a training and development management council, composed of senior managers departmentwide, was established in 1996 to provide policy and direction on all training activities. In addition, two centers of excellence have been established to promote consistent, cost-effective, and technically superior training activities in the areas of environmental management and safeguards and security.<sup>5</sup> Furthermore, a comprehensive training and development business plan is being developed to implement key training initiatives relating to financial management and cost control.

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<sup>5</sup>Generally, a center of excellence is an organization that has been selected for its training, development, and technical expertise in a topical area that cuts across the entire department.

AGENCY COMMENTS

We provided copies of a draft of our report to DOE for its review and comment. DOE generally agreed with the information presented (see enc. VI). DOE also discussed some steps it has taken that have improved and will continue to improve the Department's contractor employee training and development while reducing costs. Those steps included the creation of a training and development management council to oversee all training activities and the creation of two centers of excellence relating to environmental management and safeguards and security. Those steps have already been recognized in this report.

SCOPE AND METHODOLOGY

We conducted our work at DOE headquarters in Washington, D.C. We obtained data on DOE's actual contractor training costs for fiscal years 1995 through 1997 and estimated training costs for fiscal year 1998 from DOE's Office of Training and Human Resource Development, which is responsible for the departmentwide training and development of DOE employees. In compiling these data, this office informed us it had taken such actions as having detailed discussions with DOE field officials to ensure the accuracy of the data. Independently, we also contacted DOE field and contractor officials on a selected basis and substantiated the data's reasonableness.

We obtained detailed contractor training information by contacting DOE and contractor officials at four DOE field locations—the Oak Ridge Operations Office, the Richland Operations Office, the Rocky Flats Field Office, and the Savannah River Operations Office. These four locations were selected because their annual expenditures for contractor training have been among the highest across the DOE complex and, collectively, they accounted for 48 percent of DOE's expenditures for contractor employee training in fiscal year 1997. Each of the four DOE locations fund many similar contractor training courses, but they also are unique, for example, in the number of the contractor employees on-site as well as the extent to which contractor training has been outsourced to vendors. At these four DOE locations, we obtained information on the percentage of contractor training courses given that the contractors estimated was required by regulations; the length and the cost of specific contractor training courses; and the performance measures DOE used to evaluate the efficiency and the effectiveness of this training. We could not verify the percentage of those courses required by regulations because not all of the contractors had detailed information matching their courses to a specific requirement. In contrasting the length and the cost of specific contractor

B-279672

training courses mentioned in this report, we selected courses that were offered at two or more of the DOE locations we reviewed and were listed by DOE as being generally provided by contractors departmentwide. We determined that specific contractor training courses were similar by reviewing the contractors' descriptions for those courses.

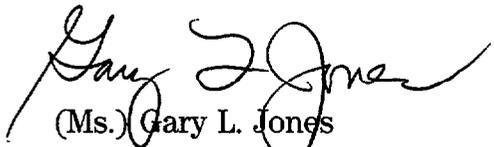
We further contacted DOE headquarters, DOE field, and contractor officials to determine what actions had been taken to reduce contractor training costs. For the same purpose, we also contacted officials with the Training Resources and Data Exchange, a network of DOE offices and DOE contractors that seeks to improve the quality of training and development. We also contacted an official with DOE's Office of Nuclear Safety Policy and Standards, which has evaluated the cost savings resulting from sharing training-related information. We performed this work from October 1997 through April 1998 in accordance with generally accepted government auditing standards.

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As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that time, we will provide copies to appropriate congressional committees, the Secretary of Energy, and other interested parties. We will also make copies available to others upon request.

If you or your staff have any questions, please call me at (202) 512-8021. Major contributors to this report include Robert Baney, William Seay, and William Fenzel.

Sincerely yours,



(Ms.) Gary L. Jones  
Associate Director, Energy,  
Resources, and Science Issues

Enclosures - 6

DOE CONTRACTOR EMPLOYEE TRAINING COSTS, FISCAL YEARS 1995-98

Table 1.1: Summary of DOE Contractor Employee Training Costs, Fiscal Years 1995-98

Contractor at	Annual training expenditure			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Albuquerque Operations Office	\$37,391,000	\$43,571,000	\$40,192,000	\$39,536,700
Chicago Operations Office	8,061,400	7,674,000	6,129,800	5,941,900
Chief Financial Officer	0	0	29	0
Civilian Radioactive Waste Management	3,928,086	1,134,077	2,248,858	2,248,858
Fossil Energy	1,980,084	2,309,800	2,615,500	2,041,300
Golden Field Office	638,000	224,000	110,000	110,000
Idaho Operations Office	18,035,700	14,501,000	12,420,000	12,710,350
Nevada Operations Office	3,553,800	3,192,995	3,087,900	3,032,000
Nonproliferation and National Security	4,479,250	4,326,300	4,697,350	4,714,220
Oak Ridge Operations Office	46,049,000	37,260,000	14,695,000	12,695,000
Oakland Operations Office	14,366,000	13,451,500	13,071,000	12,705,000
Ohio Field Office	10,350,000	7,196,000	7,557,000	7,883,000
Pittsburgh Naval Reactors Office	867,000	953,000	888,400	872,400
Richland Operations Office	21,588,200	18,125,000	15,508,000	15,220,000
Rocky Flats Field Office	20,833,000	11,373,000	8,479,000	9,180,000
Savannah River Operations Office	41,291,000	51,527,000	48,430,000	38,391,410
Schenectady Naval Reactors Office	484,140	775,800	731,800	741,000
<b>Subtotal<sup>a</sup></b>	<b>\$233,895,660</b>	<b>\$217,594,472</b>	<b>\$180,861,637</b>	<b>\$168,023,138</b>

Contractor at	Annual training expenditure			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Value of time for personnel being trained <sup>b</sup>	231,018,839	172,669,639 <sup>c</sup>	141,322,693	136,582,603
<b>Total</b>	<b>\$464,914,499</b>	<b>\$390,264,111</b>	<b>\$322,184,330</b>	<b>\$304,605,741</b>

<sup>a</sup>This is the cost of in-house training organizations and the cost associated with contracting for training.

<sup>b</sup>This is the cost associated with employees' attendance at training. It includes salary and/or fringe benefits, which are calculated by multiplying the duty hours both in training and traveling to and from training by a DOE-calculated average hourly cost rate. Travel costs are included except where noted.

<sup>c</sup>Travel costs are not included.

Source: DOE.

Table I.2: Average Annual Training Expenditure per Contractor Employee, Fiscal Years 1995-98

Contractor at	Average annual training expenditure per contractor employee			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Albuquerque Operations Office	\$1,599	\$1,923	\$1,823	\$1,828
Chicago Operations Office	1,072	1,069	632	613
Civilian Radioactive Waste Management	2,888	2,388	1,328	1,184
Fossil Energy	943	1,167	1,757	1,419
Golden Field Office	727	356	173	136
Idaho Operations Office	2,964	2,527	2,114	2,058
Nevada Operations Office	785	1,155	1,317	1,252
Nonproliferation and National Security	1,199	1,024	1,847	1,041
Oak Ridge Operations Office	2,647	2,356	1,073	977
Oakland Operations Office	1,495	1,476	1,327	1,277
Ohio Field Office	2,417	1,926	1,885	2,019
Pittsburgh Naval Reactors Office	272	315	299	294
Richland Operations Office	1,637	1,498	1,512	1,639
Rocky Flats Field Office	3,086	1,697	1,346	1,543
Savannah River Operations Office	2,643	3,583	3,503	2,779
Schenectady Naval Reactors Office	163	280	308	274

Contractor at	Average annual training expenditure per contractor employee			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Total/overall average	\$1,902	\$1,921 <sup>a</sup>	\$1,645	\$1,525

<sup>a</sup>According to the American Society for Training and Development's Benchmarking Forum, the average annual training expenditure per employee for private industry was \$1,526 in calendar year 1996. The Forum is a cooperative venture among national and international companies with strong commitments to employee training. Data for calendar year 1996 was the latest available.

Source: DOE.

Table I.3: Average Annual Training Days per Contractor Employee, Fiscal Years 1995-98

Contractor at	Average annual training days per contractor employee <sup>a</sup>			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Albuquerque Operations Office	5	6	6	6
Chicago Operations Office	6	6	4	4
Civilian Radioactive Waste Management	6	6	2	2
Fossil Energy	4	4	4	2
Golden Field Office	2	1	1	1
Idaho Operations Office	17	15	7	7
Nevada Operations Office	5	5	7	7
Nonproliferation and National Security	0	0	0	0
Oak Ridge Operations Office	5	5	5	4
Oakland Operations Office	6	6	6	6
Ohio Field Office	7	3	4	4
Pittsburgh Naval Reactors Office	3	3	2	2
Richland Operations Office	5	6	7	7
Rocky Flats Field Office	8	3	4	4
Savannah River Operations Office	21	11	9	10
Schenectady Naval Reactors Office	2	2	2	2

Contractor at	Average annual training days per contractor employee <sup>a</sup>			
	Fiscal year 1995 (actual)	Fiscal year 1996 (actual)	Fiscal year 1997 (actual)	Fiscal year 1998 (estimated)
Total/overall average	8	6	5	5

<sup>a</sup>The number of annual training days provided has been rounded to the nearest whole number.

Source: DOE.

PERCENTAGE OF CONTRACTOR EMPLOYEE TRAINING COURSES GIVEN  
AT SELECTED DOE FIELD LOCATIONS THAT CONTRACTORS ESTIMATED WERE  
REQUIRED BY FEDERAL AND/OR STATE REGULATIONS OR DOE ORDERS

Contractor at	Percentage of training courses the contractors considered were required by federal and/or state regulations or DOE orders <sup>a</sup>
Oak Ridge <sup>b</sup>	65.5%
Richland <sup>c</sup>	97.6% <sup>d</sup>
Rocky Flats	99.2%
Savannah River	98.1% <sup>d,e</sup>

<sup>a</sup>These percentages also include training courses mandated by local site regulations.

<sup>b</sup>The data for Oak Ridge are based on information from Lockheed Martin Energy Systems, which is the major provider of contractor employee training at the site.

<sup>c</sup>The data for Richland are based on information from Fluor Daniel Hanford, Inc., which is the major provider of contractor employee training at the site.

<sup>d</sup>This percentage was an estimate based on the judgment of the contractor employee training staff.

<sup>e</sup>This estimate may be high. A January 1997 contractor internal audit found that as high as 30 percent of the training courses listed as required by regulation had either an outdated or a vague regulatory reference. The contractor could not provide us a revised listing that showed the citation for each course considered required by regulation.

Source: DOE.

COMPARISON OF SPECIFIC CONTRACTOR EMPLOYEE TRAINING COURSES  
GIVEN AT SELECTED DOE FIELD LOCATIONS

Table III.1: Length of Specific Contractor Training Courses, Fiscal Year 1997

Length in hours

Course	Contractor at			
	Oak Ridge <sup>a</sup>	Richland <sup>b</sup>	Rocky Flats	Savannah River
Back Injury Prevention	1.5	4.0 (Cancelled - 2/97)	4.0	5.0
Bloodborne Pathogens-- Initial	1.5	4.0	Not offered	4.0
Confined Space Entry	4.0	4.5	4.0	4.0
Criticality Safety for Fissionable Material Workers	2.0	8.0	6.0	6.0
Defensive Driving for General Employees	4.0 <sup>c</sup>	4.0	Not offered	2.0
Diversity Awareness	8.0	Not offered	Not offered	8.0
Effective Writing	1.0	Not offered	Not offered	8.0
Environmental Laws and Regulations	24.0	4.0 <sup>d</sup>	24.0	8.0
Fall Protection	3.0	8.0	8.0	4.0
General Employee Training	3.0 <sup>c</sup>	4.0	4.0	8.0
Hands-on Fire Extinguisher Use	0.25 <sup>c</sup>	2.0	Not offered	3.0

Course	Contractor at			
	Oak Ridge <sup>a</sup>	Richland <sup>b</sup>	Rocky Flats	Savannah River
Hazard Communication	4.0	4.0	2.0	2.0
Hearing Conservation	2.0	1.0	2.0	1.0
Hoisting and Rigging	16.0	4.0	6.0	16.0
Lockout-Tagout	8.0	3.0	8.0	8.0
Occurrence Reporting	4.0	2.0	4.0	4.0
Oral Presentation Skills	16.0	Not offered	Not offered	16.0
Radiological Worker I--Initial	14.0	16.0	16.0	16.0
Radiological Worker II--Initial	18.0	24.0	16.0	24.0
Respirator Training--Basic	2.5	1.0	2.0	2.5
Root Cause Analysis	16.0	8.0 <sup>d</sup>	8.0	4.0
Seven Habits of Highly Effective People	24.0	32.0 (Cancelled - 4/97)	Not offered	8.0
Stress Management	8.0	12.0 (Cancelled - 5/97)	Not offered	8.0
Team Building	0.5	Not offered	Not offered	8.0
Time Management	4.0	Not offered	Not offered	8.0

<sup>a</sup>The data for Oak Ridge are based on information from Lockheed Martin Energy Systems, which is the major provider of contractor employee training at the site.

<sup>b</sup>The data for Richland are based on information from Fluor Daniel Hanford, Inc., which is the major provider of contractor employee training at the site.

<sup>c</sup>According to the contractor training director for Lockheed Martin Energy Systems, the defensive driving course was offered as a one-time program but continues to be advertised in the training catalog as a program that can be required at line management's direction; the fire extinguisher training course is now offered through required reading; and the general employee training course is also offered through 2 hours of intranet training. The training director further indicated that several other courses are offered through both classroom and intranet training.

<sup>d</sup>According to a program analyst at DOE's Richland Office of Training, the site contractor also provides a more comprehensive 24-hour course on environmental laws and regulations and two other 12-hour courses on aspects of root cause analysis.

Source: DOE.

Table III.2: Cost per Classroom Hour for Specific Contractor Training Courses, Fiscal Year 1997

Course	Contractor at			
	Oak Ridge <sup>a</sup>	Richland <sup>b</sup>	Rocky Flats	Savannah River
Back Injury Prevention	\$19	\$27	\$21	\$10
Bloodborne Pathogens--Initial	19	29	Not offered	9
Confined Space Entry	19	40	<9 <sup>c</sup>	9
Criticality Safety for Fissionable Material Workers	19	43	<16 <sup>c</sup>	16
Defensive Driving for General Employees	19	49	Not offered	16
Diversity Awareness	21	Not offered	Not offered	8
Effective Writing	32	Not offered	Not offered	9
Environmental Laws and Regulations	26	38	8	9
Fall Protection	28	35	<15 <sup>c</sup>	15
General Employee Training	19	24	>9 and <19 <sup>c</sup>	9
Hands-on Fire Extinguisher Use	10	51	Not offered	16
Hazard Communication	19	33	>9 and <19 <sup>c</sup>	9
Hearing Conservation	19	82	>9 and <19 <sup>c</sup>	9
Hoisting and Rigging	37	82	12	15

Course	Contractor at			
	Oak Ridge <sup>a</sup>	Richland <sup>b</sup>	Rocky Flats	Savannah River
Lockout-Tagout	28	49	<9 <sup>c</sup>	9
Occurrence Reporting	21	31	11	9
Oral Presentation Skills	21	Not offered	Not offered	9
Radiological Worker I--Initial	37	36	>9 and <36 <sup>c</sup>	9
Radiological Worker II--Initial	37	29	>9 and <29 <sup>c</sup>	9
Respirator Training--Basic	19	63	>9 and <19 <sup>c</sup>	9
Root Cause Analysis	21	43	<16 <sup>c</sup>	16
Seven Habits of Highly Effective People	21	15	Not offered	9
Stress Management	21	29	Not offered	9
Team Building	21	Not offered	Not offered	9
Time Management	32	Not offered	Not offered	9

Note: The cost per classroom hour has been rounded to the nearest whole dollar.

<sup>a</sup>The data for Oak Ridge are based on information from Lockheed Martin Energy Systems, which is the major provider of contractor employee training at the site.

<sup>b</sup>The data for Richland are based on information from Fluor Daniel Hanford, Inc., which is the major provider of contractor employee training at the site.

<sup>c</sup>The specific cost per classroom hour for this course was provided by the contractor; however, it is not disclosed because the training subcontractor considers the information proprietary.

Source: DOE.

PERFORMANCE MEASURES USED TO EVALUATE CONTRACTOR  
TRAINING'S EFFICIENCY AND EFFECTIVENESS

Contractor at	Performance measures for fiscal year 1997
Oak Ridge	<p>None established for the K-25 or the Y-12 plants.</p> <p>For the Oak Ridge National Laboratory, the measures included 1) developing a plan to consolidate all training records into an integrated interim database and 2) developing a comprehensive assessment of the total training costs for the Oak Ridge National Laboratory.</p>
Richland	<p>The measures included 1) providing a plan to eliminate redundant training functions and evaluating the consolidation of all training under one organization<sup>a</sup> and 2) developing a plan to eliminate redundant courses, which will result in a 98 percent nonredundant rate.</p>
Rocky Flats	<p>The measures included 1) having no class cancellations due to the lack of a qualified instructor and 2) fulfilling 95 percent of the special requests for training provided that more than 3 days notice is given.<sup>b</sup></p>
Savannah River	<p>None established, but DOE requested that certain activity data be periodically provided, including 1) the number of workers receiving training and 2) the number of no-shows for training classes.</p>
DOE-wide	<p>None established, but DOE plans to develop some performance measures by the summer of 1998 that could be used as guidelines to track and report on the contractors' training performance. Measures under consideration include 1) the cost and the hours of training per employee and 2) the cost per contractor training hour delivered.</p>

<sup>a</sup>Presently, each of the following contractors offer or bring in training courses at Richland--Bechtel Hanford Inc., Fluor Daniel Hanford Inc., Hanford Environmental Health Foundation, and Pacific Northwest National Laboratory.

<sup>b</sup>Several second-level performance measures were also required, such as submitting at least 10 proposals to improve the effectiveness of training courses in fiscal year 1998.

Source: DOE.

ACTIONS TAKEN TO IMPROVE DOE CONTRACTOR TRAINING'S EFFICIENCY AND EFFECTIVENESS

Action taken	How it may affect contractors at selected DOE locations
<p>Consolidate training operations at DOE locations where multiple DOE contractors or multiple contractor training organizations are present.</p>	<p><b>Oak Ridge:</b> (Fiscal year 1997 contractor training expenditure was \$14,695,000.) In midfiscal year 1994, the site contractor consolidated training there and reported a cost savings of about \$3.3 million the following year. Since that consolidation, two contractor training organizations have emerged--one for Lockheed Martin Energy Systems (K-25/Y-12) and one for Lockheed Martin Energy Research (ORNL). According to the training director for Lockheed Martin Energy Systems, the two contractors operate as separate companies and, consequently, offer similar training on multiple courses, such as Confined Space Entry, Hazardous Waste Operations and Emergency Response, Lockout-Tagout, and Radiological Worker. According to a DOE Oak Ridge official, additional training redundancy may occur when a new contractor responsible for environmental management at Oak Ridge commences operations in April 1998.</p> <p><b>Richland:</b> (Fiscal year 1997 contractor training expenditure was \$15,508,000.) All four prime contractors separately offer or bring in training for their employees--Bechtel Hanford Inc., Fluor Daniel Hanford Inc., Hanford Environmental Health Foundation, and Pacific Northwest National Laboratory. In response to DOE/Richland's concerns that the four contractors might be offering redundant training, Fluor Daniel conducted a September 1997 evaluation of contractor training and identified possibly as many as 216 redundant courses out of a total of 1378 courses offered. Examples include DOE NEPA process, Fall Protection and Retrieval Devices, Basic Respiratory Protection, and Worker Hazard Communication.<sup>a</sup></p> <p><b>Rocky Flats:</b> (Fiscal year 1997 contractor training expenditure was \$8,479,000.) No further consolidation of training appears possible because there is one training organization for the Kaiser-Hill Company. However, site officials indicated that they would remain alert to possible improvements as opportunities present themselves.</p> <p><b>Savannah River:</b> (Fiscal year 1997 contractor training expenditure was \$48,430,000.) The central Westinghouse training organization and eight Westinghouse divisions each have their own training organization. A January 1997 contractor internal audit found that duplicate training courses were being offered among the Westinghouse divisions on many subjects. The net effect, according to the audit report, was the duplication of training development, delivery, and administration. Our review of an October 30, 1997, listing of active contractor training courses also confirmed the duplication of training. For instance, the listing showed that seven divisions were offering 41 separate courses on electricity. In response to our review, the contractor indicated that 13 courses on electricity were actually either inactive, invalid, or discontinued and will be deleted from the active list.</p>

Action taken	How it may affect contractors at selected DOE locations
<p>Outsource training courses to qualified vendors.</p>	<p><b>Oak Ridge:</b> The site contractor has outsourced its employee training to a limited degree, partnering for example with local colleges to produce various courses (cost savings, if any, were not estimated). With the addition of a new contractor for environmental management at Oak Ridge during calendar year 1998, according to a DOE/Oak Ridge training specialist, additional outsourcing of contractor training may occur.</p> <p><b>Richland:</b> The site contractor made a January 1998 award to outsource about 25 percent of its employee training.<sup>b</sup> The anticipated reduction to the contractor training budget is estimated by the site contractor to be about \$2 million over the 3-year term of the contract.</p> <p><b>Rocky Flats:</b> The site contractor outsourced about 65 percent of its employee training courses to a vendor during fiscal year 1997. Total savings achieved was estimated by the site contractor to be more than \$0.6 million over the two year period covering fiscal years 1997 and 1998.</p> <p><b>Savannah River:</b> The site contractor has not actively pursued the outsourcing of its employee training. The site contractor concluded that outsourcing would not be cost beneficial after reviewing the costs contained in (1) an unsolicited proposal it received from a consortium of local colleges and (2) contracts awarded to two outside vendors which have provided support during peak training periods.<sup>c</sup> The site contractor also believes in-house training offers certain advantages such as the ability to assign staff to training positions for developmental purposes.</p>
<p>Use training course materials from other DOE locations rather than develop courses independently.</p>	<p><b>Oak Ridge, Richland, and Rocky Flats:</b> According to DOE and contractor training officials, the sites survey other DOE locations for materials prior to developing new courses and making major revisions to existing ones.</p> <p><b>Savannah River:</b> According to Westinghouse's site training manager, the contractor makes limited use of training course materials from other DOE locations.<sup>d</sup> Instead, Westinghouse divisions spend funds developing courses similar to ones that have been already developed at other DOE locations. Examples of such courses and their respective development costs include General Chemistry for Laboratory Technicians (\$50,000), Math for Laboratory Technicians (\$45,000), Motors and Generators (\$21,402), Fall Protection (\$17,200), and Seven Habits of Highly Effective People (\$5,600). In fiscal year 1997, the contractor at Savannah River spent over \$3.9 million developing training courses at that DOE field location.</p>
<p>Standardize the development and the delivery of contractor training courses generally provided across the DOE complex and review and determine if the percentage of discretionary courses offered (i.e., not required by regulation) could be reduced.</p>	<p><b>Oak Ridge, Richland, Rocky Flats, and Savannah River:</b> The length and cost of generally provided courses offered at the four selected sites varied and, in some cases, varied significantly. The percentage of discretionary training courses offered at those four sites was not consistent.</p>

<sup>a</sup>The other three prime contractors responded to this information by indicating that they did not think any of their courses were redundant. In some cases, the contractors explained that no redundancy existed because the respective contractor could offer the course more cost efficiently.

<sup>b</sup>The site had already outsourced about 16 percent of its contractor training to local colleges and other institutions.

<sup>c</sup>The site did not consider outsourcing training to the Rocky Flats training subcontractor, which is headquartered in the town where the Savannah River Operations Office is located.

<sup>d</sup>The Westinghouse site training manager also said that the contractor has no policy or procedures requiring it to consider using materials from other DOE locations before deciding to develop a new training course. The training manager did, however, provide evidence that, over the years, the contractor has exported training materials it had developed to other DOE sites. The training manager said the contractor has had much more limited success obtaining training course materials from other DOE sites that met the contractor's identified needs.

Source: DOE.

COMMENTS FROM THE DEPARTMENT OF ENERGY**Department of Energy**

Washington, DC 20585

April 22, 1998.

Victor S. Rezendes, Director  
Energy, Resources, and Science Issues  
U.S. General Accounting Office  
Washington, DC 20548

Dear Mr. Rezendes:

Thank you for the opportunity to comment on the General Accounting Office draft report entitled "Department of Energy: DOE Contractor Employee Training." We are in general agreement with the information provided in the report and would like to provide information regarding the steps that have improved and will continue to enhance the Department's contractor employee training and development while reducing costs.

The Department has aggressively pursued methods to identify and implement cost saving measures for training. The Training and Development Management Council (TDMC), composed of senior managers from throughout the Department, has been created to provide policy and direction of training activities. These policies and directions are carried out by a Training and Development Coordinating Group (TDCG), made up of senior training officials from throughout the Department, to achieve cost sharing and efficiency in training and development activities.

A Center of Excellence concept has been established to promote consistent, cost-effective and technically superior training activities. Two such centers have been approved. The National Environmental Training Office provides an integrated program to strengthen and maintain the technical environmental management skills and abilities of Federal and contractor employees. The Safeguards and Security Central Training Academy provides for effective, standardized safeguards and security programs. Two more Centers are planned for fiscal year 1998 or early 1999.

A comprehensive Training and Development Business Plan is being developed to carry forward key corporate training initiatives defined by the TDMC. This plan details training and development products and services as well as financial management and cost control requirements for implementation.

The Department's contractor training costs have decreased from approximately \$234M in fiscal year 1995 to an anticipated \$168M in fiscal year 1998. This represents a 28% reduction in training costs over that period. I believe that the corporate approach to training and development will result in further cost reductions. Technology Supported Learning Systems, including advanced concepts such as distance learning, computer based training, and Internet applications will enable the Department to not only reduce training costs, but also to decrease duplication and overlap of training development.



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Once again, I would like to thank you for the opportunity to participate in this audit and to comment on this draft report. Working with your staff has provided us with valuable information which will be very useful in determining how well we are meeting our cost saving goals, and has also identified potential areas for improvement.

If you have any questions about our comments, please contact Bob Sottile, from the Office of Training and Human Resource Development, on (202) 426-1538.

Sincerely,



Archer L. Durham  
Assistant Secretary for  
Human Resources and Administration



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