

Environment, Safety and Health

Executive Budget Summary

Mission

The Office of Environment, Safety and Health (EH) is committed to protection of Department of Energy (DOE) workers, the public, and the environment. This commitment is demonstrated by continuous improvement in program and policy development; independent oversight of the status of environment, safety, health, and safeguards and security programs; and sharing of technical resources, assistance and information. EH applies its resources to DOE activities in order to prevent accidents or injuries to workers and the public, and harm to the environment. EH is the Department's major source of expertise in disciplines such as environmental protection, nuclear safety engineering, public health, industrial hygiene, radiation protection, construction safety, epidemiology, and occupational medicine. The EH goal is to leverage resources and skilled personnel to efficiently provide DOE's line management programs with the tools and independent program assessments required to preserve safety and to effectively protect national security interests at DOE sites. Open communication, participation, and performance feedback on EH activities are integral to EH's success.

The Environment, Safety and Health program is funded in three appropriations: (1) Energy Supply, (2) Other Defense Activities, and (3) Defense Environmental Restoration and Waste Management. The Energy Supply EH program consists of: Technical Assistance, National Environmental Policy Act (NEPA), Management and Administration, and a Program Direction decision unit which includes the EH Working Capital Fund. The Other Defense Activities EH program includes: Oversight, Domestic and International Health Studies programs, Radiation Effects Research Foundation (RERF) program, and a Program Direction decision unit. In addition, the Defense Environmental Restoration and Waste Management appropriation supports an additional increment of health studies at sites where the Department's Environmental Management program conducts cleanup.

DOE has transitioned to new missions which include weapons dismantlement, environmental cleanup, and facility decontamination and decommissioning. Residual hazards at DOE facilities, especially in the nuclear weapons complex, are the result of more than 50 years of nuclear materials production and processing under less than optimum conditions, the impacts of which are still being characterized. DOE harbors the largest inventory of hazardous nuclear materials in the world outside of the former Soviet Union, as well as large quantities of hazardous chemicals. Due in large part to the sudden end of the Cold War, and the resultant rapid shutdown of the production and processing facilities, much of this material (including plutonium, spent nuclear fuel, highly enriched uranium, radioactive waste, radioactive isotopes, and hazardous chemicals) is stored in aging and deteriorating facilities, and under conditions that are in themselves hazardous. There is still a lack of reliable data for many of these facilities on the most basic safety issues, such as non-compliant electrical and ventilation systems. In addition to these challenges, the problem of secure storage of special nuclear material and classified information remains.

The EH mission is one of DOE's highest priorities. EH technical experts work with line program managers to develop tools needed to manage environment, health, and safety at DOE facilities more effectively and at less cost to taxpayers. EH has demonstrated that the Department can do its work better, more safely, and at less cost by integrating environment, health, and safety into the planning and

execution of work. EH will continue to work with its partners in the field to ensure that safety is no longer viewed as an "add-on" that produces only paper and needless cost, but as an asset that allows efficient targeting of the most urgent risks, most efficient use of limited resources, and effective accomplishment of work.

The need for effective programs to identify environment, safety, and health concerns at the project and individual activity level remains critical. Emphasis has been placed on assuring that prior commitments to fund programs to reduce environment, safety, and health concerns are met represent important accomplishments, but more remains to be done. The downsizing and realignment of the weapons production efforts will necessitate changes in the conduct of operations. In addition, the limitations on funding Environmental Management work as needs increase will create conflicts between meeting details of compliance agreements negotiated in earlier years and organizing efforts to pursue an integrated approach to risk reduction. EH's analytical products are shared DOE-wide to assist the sites in appropriate and timely resolution of identified and emerging environment, safety, and health concerns.

Mission Supporting Goals and Objectives

The EH overall major goals and objectives are as follows:

- Provide a standardized corporate independent oversight process to appraise the effectiveness of environment, safety, health and safeguards and security programs throughout DOE. To accomplish the goal of corporate independent oversight, the following objectives have been established: (1) identify, prioritize, and target Departmental needs for independent oversight; (2) incorporate DOE's guiding integrated safety management policy and principles into all oversight activities; (3) sustain a coordinated and consistent independent oversight for DOE; (4) administer an enforcement program that appropriately penalizes significant violations of nuclear safety requirements; and (5) disseminate lessons learned to reinforce good practices.
- Provide quality, timely, efficient, and effective corporate support and technical services. To accomplish this goal, the following objectives have been established: (1) provide Departmental environment, safety, and health crosscutting programs and technical services that are aligned with critical missions and integral to mission accomplishment; (2) evaluate operational performance data and identify for corporate assessment and action those vulnerabilities that pose urgent risks to DOE workers, the public, and mission accomplishment; (3) continue ongoing partnerships with private industry, government agencies, and national safety organizations to promote information exchange and program benchmarking to enhance DOE safety programs; and (4) improve corporate services through feedback and performance measures.
- Provide Departmental requirements, guidance, and policy for environment, safety and health program implementation and measurement. To accomplish this goal, the following objectives have been developed: (1) support ongoing field analysis, interpretation, and application of "WorkSmart" standards (safety guidelines) and provide needed regulatory interpretations and implementation guidance; (2) interface with outside regulators and provide comments on pending regulations pertinent to DOE and regulatory policies and actions having impact on DOE missions; (3) continue stewardship and improve effectiveness of the new environment, safety, and health orders; and (4) develop, issue, and implement technical standards for DOE activities based on appropriate consensus standards.

- Provide a National Environmental Policy Act (NEPA) process that fosters sound Departmental planning and decision-making and builds public trust through effective process implementation. To accomplish this goal, EH has established the following objectives: (1) ensure timely and adequate completion of NEPA reviews through technical assistance, independent policy review, and approval recommendations for major programmatic environmental impact statements (EISs), site-wide and other EISs, and related NEPA documents; (2) ensure the consistency and quality of NEPA documents and increase the efficiency of NEPA personnel by determining and responding to customer needs; (3) issue guidance on selected technical and policy topics; (4) conduct workshops for Headquarters and field personnel; and (5) participate in NEPA process improvement teams and other initiatives that foster continuing improvement in the NEPA process.
- Ensure environment, safety, and health performance and management accountability. To accomplish this goal, EH has established the following objectives: (1) develop and support implementation of DOE-wide environment, safety, and health budget and planning process that defines scope, identifies costs, prioritizes activities based on relative risk, and allocates resources based on established commitments in a visible manner for implementation of environment, safety, and health program activities; (2) improve environment, safety, and health performance through the application of total quality approaches to management processes; and (3) integrate environment, safety, and health in all Departmental business functions.
- Support realignment of contract terms and conditions to incorporate environment, safety, and health management systems development needed to move towards a corporate business performance mode. To accomplish this goal, EH has established the following objectives: (1) identify ways for line program management to improve environment, safety, and health performance as part of work execution systems; and (2) integrate environment, safety, and health in all Departmental business functions.
- Conduct EH's mission in an open, trustworthy and responsive manner. To accomplish this goal, EH's objectives are: (1) establish and implement programs that strengthen the public's trust, confidence, credibility and respect in and for EH; and (2) support the Department's efforts to reduce the volume of national security information and minimize future classification.
- Promote the health and safety of DOE's workers and communities surrounding Departmental sites and reduce radiation and hazardous exposure through understanding of radiation effects and other hazards on humans. To accomplish this goal, EH's objectives are: (1) assist the field in the identification and application of effective approaches to prevent injury and illness; and (2) support the development of domestic and international health effects information on populations exposed to releases of varying levels of ionizing radiation.

The legal requirements that affect the activities of the EH organization include all environmental, safety, and health Federal regulations, as well as legislation such as the Atomic Energy Act of 1954, as amended, and the National Defense Authorization Act for Fiscal Year 1995.

Strategy

The Office of Environment, Safety and Health's (EH) intent is to assure that quality, objectivity, responsiveness and innovation are hallmarks of all EH activities.

EH's commitment to ensure the safety and health of the DOE workforce and members of the public, and the protection of the environment in all Department activities is our strategic objective, part of our performance agreement with the President, and a key part of the DOE Strategic Plan. To accomplish this objective, EH integrates and embeds sound environment, safety, and health management practices into the performance of DOE's day-to-day work. EH ensures that environment, safety and health priorities are clearly identified and given appropriate consideration for funding. EH is working with the Nuclear Regulatory Commission (NRC) and the Occupational Safety and Health Administration (OSHA) to evaluate the costs and benefits of external regulation of DOE safety and health activities. Pilot programs are being conducted.

Another strategic objective is to continually work with the public community in an open, frank, and constructive manner as a good neighbor and public partner. To accomplish this objective, EH fosters strong partnerships with neighboring DOE communities, regulators, and other stakeholders to determine priorities and solutions. In addition, EH increases public awareness of DOE's mission by improving the quality, timeliness, frequency, and sufficiency of information disseminated on the Department's functions, successes, lessons learned and future activities. EH focuses on developing management-level analytical products, reducing redundancies, and enhancing staff development. EH serves its principal customers in the following major areas: (1) development of Departmental environment, safety, and health requirements, guidance and interpretations that are effective and efficient to guide program implementation; (2) improvement of environment, safety and health performance and management accountability by supporting the integration of environment, safety, and health considerations into the Department's business and budget planning processes; (3) provision of critical corporate environment, safety and health support and services, including regulatory and industry interface, technical assistance to improve program management and execution, and to assist in the efficient and effective implementation of requirements; and (4) conduct independent oversight activities that provide a comprehensive status of environment, safety, health, and safeguards and security performance at DOE facilities.

One of DOE's greatest challenge is performing new types of hazardous work safely and securely at facilities that were designed to meet the requirements of outdated rules and orders. Many old, poorly-maintained facilities do not meet current building codes and safety standards. WorkSmart standards provide a graded approach to developing safety standards that allow the Department to tailor the standards to the work and the facilities. Pilot applications of this process indicate that worker safety can be enhanced while program costs are reduced.

The EH independent oversight program has been extremely useful in helping the Department effectively identify and target unacceptable risk. Comprehensive environment, safety and health evaluations provide DOE management with validated, professional appraisals of the site's performance by identifying areas of greatest risk in terms of both immediate hazards and overall program management. The foundation of this approach is an assessment of management effectiveness based on DOE's integrated safety management policy and the guiding principles of safety management contained in that policy. These assessments supply DOE management with validated, professional appraisals of the site's performance. Using the guiding principles of safety management permits objective program analysis. Although much

effort remains, changes in the Department's ability to apply resources to areas of greatest need have already been observed, and will become increasingly evident in efficiency in addressing environment, safety, health, and safeguards and security issues.

The rapid transition of the Department to a business management model with its emphasis on gaining cost-efficiencies, privatization and innovative management structures in the field has brought concomitant changes in how EH functions. Special emphasis will be given to self-assessment and self-reporting by field elements as a source of performance information, coupled with increased emphasis on EH performance analysis. Likewise, increased priority will be given to help move DOE line management from outdated environment, safety and health management approaches and systems to programs that facilitate the exchange of innovative business or environment, safety and health management practices that are preventive and cost-efficient in nature. From a technical safety assistance perspective, special emphasis will be given to urgent programmatic needs such as safely managing the decommissioning and decontamination of aging DOE facilities and hazardous waste.

EH will continue to build on its strong record of cutting costs without risking the safety and health of DOE workers, the quality of the environment, or the quality of the health studies program. Even as challenges have grown, the EH budget has been reduced by cutting administrative overhead costs and focusing on the highest priority needs. An EH staffing plan has identified the most critical functions and closely matched personnel to fit those needs. Functions of lower priority will continue to be eliminated. This will result in a cut in Federal personnel from 375 in FY 1998 to 355 in FY 1999 with 345 full-time-equivalents in FY 2000. EH has also analyzed how it utilizes support contractors and established specific criteria for their limited use. While EH has some unique national-level experts, technical contractual services continues to be more practical and cost-effective, providing a surge pool of technical expertise on an as needed basis. The evolving needs for national-level expertise in a multitude of disciplines can best be met through the use of contractors who can rapidly respond to the continually changing skill mix required of EH activities across the DOE complex.

The medical surveillance for the former workers program, required by the 1993 Defense Authorization Act, could potentially cost hundreds of millions of dollars. EH has worked during the past three years to develop a cost-effective approach that relies on feasibility studies to target populations most at risk. In FY 1996, EH awarded contracts to six consortia of universities, labor unions, and health specialists. In FY 1997, each of these consortia began conducting the feasibility assessment phases of their projects. In addition, EH issued a request for proposals for major sites not addressed as part of the first solicitation. In FY 1998, the medical surveillance phase of the first set of projects began, and the feasibility assessments for the four newly awarded cooperative agreements were initiated. In FY 1999, all ten projects will be in the implementation phase of their medical surveillance programs.

DOE, in partnership with the Department of Health and Human Services (HHS), has begun a process that will produce a strategy to include a public health agenda for each DOE site. Developed in coordination with HHS, this strategy will have clearly defined goals, objectives, and priorities for health activities to ensure that the issues of greatest concern to DOE workers and communities are addressed. All newly-funded health activities conducted by HHS will be consistent with the priorities established in this strategy.

In the Defense Environmental Restoration and Waste Management Appropriation, DOE supports public health studies in conducting a range of health-related activities. These activities are managed by EH and will be included in the public health agenda being developed in partnership with HHS.

Major Changes

The Department has consolidated the management of Health Studies in the Office of Environment, Safety and Health to provide a focal point for ensuring that the results of these efforts are used for the maximum benefit of DOE workers and communities.

The Department funds a large number and wide variety of epidemiologic and other health-related activities to address the potential effects of DOE operations on the health of DOE workers and communities. Through a Memorandum of Understanding with the Department of Health and Human Services (HHS), studies of worker and community health are funded through the Office of Environment, Safety and Health under the Other Defense Activities account, and are administered by the HHS/CDC. Prior to FY 1999, similar activities were separately funded by the Office of Environmental Management under the Defense Environmental Restoration and Waste Management Appropriation, and were independently conducted by HHS under its statutory authority under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Management of all HHS health studies (conducted by both CDC and ATSDR) was consolidated under EH in FY 1999.

The funding request for Public Health Activities in the Defense Environmental Restoration and Waste Management Appropriation for Fiscal Year 2000 is \$20,000,000. These studies have been transferred by the Congress for the Office of Environment, Safety and Health to manage. This request could include funding for the Hanford Medical Monitoring Program and the Iodine-131 Exposure Registry, should they be incorporated into the DOE/HHS public health agenda for Hanford and base Public Health program activities at DOE sites. Should the medical monitoring program or exposure registry not be included in the Hanford health agenda for FY 2000 or be modified from current proposals, the Department will submit an appropriate Reprogramming Request.

Funding Profile

(dollars in thousands)

	FY 1998 Current Appropriation	FY 1999 Original Appropriation	FY 1999 Adjustments	FY 1999 Current Appropriation	FY 2000 Request
Energy Supply					
Operating Expenses					
Technical Assistance	21,444	16,445	0	16,445	16,445
NEPA	3,000	2,552	0	2,552	2,500
Management and Administration	17,274	13,003	0	13,003	12,807
Program Direction	23,550	18,398	0	18,398	18,998
Subtotal, Energy Supply	65,268	50,398	0	50,398	50,750
Use of prior year balances	-1,897	0	-2,970	-2,970	0
Subtotal, Energy Supply	63,371	50,398	-2,970	47,428	50,750
Other Defense Activities					
Operating Expenses					
Oversight	14,015	11,700	0	11,700	12,775
RERF	14,000	14,000	0	14,000	13,500
Health Studies	45,985	41,031	0	41,031	40,956
Program Direction	20,000	24,769	0	24,769	24,769
Subtotal, Other Defense Activities	94,000	91,500	0	91,500	92,000
Use of prior year balances	-476	0	-2,108	-2,108	0
Subtotal, Other Defense Activities	93,524	91,500	-2,108	89,392	92,000
Defense Environmental Restoration and Waste Management					
Operating Expenses					
Public Health Activities ^a	0	12,000	0	12,000	20,000
Total, Environment, Safety and Health	156,895	153,898	-5,078 ^b	148,820	162,750

^aPublic Health Activities funded in the Defense Environmental Restoration and Waste Management Appropriation were transferred by the Congress from EM for EH to manage in FY 1999.

^bAllocated share of the congressionally prescribed general reductions in the Energy Supply and Other Defense Activities Appropriations to be taken from uncosted balances.

Staffing Profile

(Whole FTEs)

	FY 1998 Comparable Appropriation	FY 1999 Budget Request	FY 2000 Request
Full-Time-Equivalents			
Energy Supply	175	129	124
Other Defense Activities	200	226	221
Total, Full-Time-Equivalents	<u>375</u>	<u>355</u>	<u>345</u>

Funding by Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Albuquerque Operations Office					
Los Alamos National Laboratory	270	270	270	0	0.0%
Pantex	150	150	150	0	0.0%
Sandia National Laboratories	365	345	345	0	0.0%
Albuquerque Operations Office	113	65	65	0	0.0%
Total, Albuquerque Operations Office	898	830	830	0	0.0%
Chicago Operations Office					
Argonne National Laboratory	1,000	680	680	0	0.0%
Brookhaven National Laboratory	2,615	2,565	2,565	0	0.0%
Chicago Operations Office	1,748	2,050	2,050	0	0.0%
Total, Chicago Operations Office	5,363	5,295	5,295	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Env Laboratory	300	300	300	0	0.0%
Radiological & Environmental Sciences Laboratory	1,400	1,400	1,400	0	0.0%
Idaho Operations Office	1,700	1,700	1,700	0	0.0%
Total, Idaho Operations Office	3,400	3,400	3,400	0	0.0%
Nevada Operations Office					
Bechtel Nevada	2,410	2,410	2,410	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	550	590	590	0	0.0%
Lawrence Livermore National Laboratory	3,738	3,730	3,730	0	0.0%
Oakland Operations Office	21,575	22,975	22,993	+18	+0.1%
Total, Oakland Operations Office	25,863	27,295	27,313	+18	+0.1%
Oak Ridge Operations Office					
Lockheed Martin Energy Systems	530	495	495	0	0.0%
Oak Ridge National Laboratory	7,525	5,190	4,990	-200	-3.9%
Oak Ridge Institute for Science & Education	5,228	4,645	4,577	-68	-1.5%
Office of Scientific & Technical Information	265	255	255	0	0.0%
Oak Ridge Operations Office	1,400	0	0	0	0.0%
Total, Oak Ridge Operations Office	14,948	10,585	10,317	-268	-2.5%
Ohio Field Office					
Fluor Daniel Fernald	25	25	25	0	0.0%
Richland Operations Office					
Pacific Northwest National Laboratory	7,793	7,300	7,300	0	0.0%
Hanford Environmental Health Foundation	50	50	50	0	0.0%
Richland Operations Office	1,861	1,480	1,480	0	0.0%
Total, Richland Operations Office	9,704	8,830	8,830	0	0.0%
Rocky Flats Field Office					
Kaiser Hill Co.	1,140	1,200	1,200	0	0.0%

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Rocky Flats Field Office	25	25	25	0	0.0%
Total, Rocky Flats Field Office	1,165	1,225	1,225	0	0.0%
Savannah River Operations Office	400	50	50	0	0.0%
All Other Sites					
Headquarters	95,092	93,953	103,055	+9,102	+9.7%
Subtotal, Environment, Safety and Health	159,268	153,898	162,750	+8,852	+5.8%
Use of prior year balances	-2,373	-5,078	0	+5,078	+100.0%
Total, Environment, Safety and Health	156,895	148,820	162,750	+13,930 ^a	+9.4%

^aThe total change of \$13,930,000 from FY 1999 to FY 2000 primarily results from: 1) an increase of \$8,000,000 in the Defense EM Public Health Activities program (from \$12,000,000 in FY 1999 to \$20,000,000 in FY 2000) which Congress transferred from EM for EH to manage, and 2) the net effect of the FY 1999 allocated share of congressionally prescribed reductions in the Energy Supply and Other Defense Activities appropriation.

Program Performance Measures

EH places its emphasis on accident prevention and excellence in protecting worker and public safety and health and achieving effective environmental standards. Success will be measured by fewer radiological and toxicological contamination events, fewer abnormal operating events, and fewer procedural violations.

EH serves as the Departmental advocate for institutionalizing effective and integrated safety management, which focuses on the key tenets of work planning, hazard analysis and hazard control. Success is measured by the implementation of enhanced work planning systems at DOE sites.

EH incorporates the existing risk-based environment, safety, and health planning and budgeting process into all new major Management and Operating and Management and Integrating Contractors contracts scheduled for renewal. Success is measured by inclusion of environment, safety, and health provisions in 100 percent of the Management and Operating and Management and Integrating Contractors contracts.

EH supports the systematic collection, analysis, and sharing of data on worker illness and injury. Success is measured by the early detection of emerging health issues and the implementation of improved health and safety practices at DOE sites.

EH performs vulnerability studies to identify environment, safety, and health vulnerabilities across the complex. Success will be measured by the reduction of the number of unaddressed serious vulnerabilities at DOE facilities from the current several dozen to zero by the end of FY 2000.

EH's multi-disciplinary, fully integrated oversight process for environment, safety, health, and safeguards and security evaluations has matured. Oversight activities serve as a catalyst for improvement and bring significant issues to senior management's attention. Success will be measured by downward trends in previously identified issues that lead to environmental releases, occupational injury and illness and recurrence of accidents.

EH is implementing nuclear safety standards for work in progress that will provide for the health and safety of workers, the public and the environment. Success will be measured by the effectiveness in implementing and complying with these nuclear safety standards on a DOE-wide basis.

The field, contractors, and outside organizations continue to adopt EH standards. Success is measured by a decrease in lost work days due to occupational illness or injury, a decrease in the number of personnel contaminations with radionuclides, and a decrease in the number of serious accidents where policy is a root cause of the problem.

David Michaels, PhD, MPH
Assistant Secretary
Environment, Safety and Health

Date

Environment, Safety and Health Other Defense Activities

Program Mission

The Office of Environment, Safety and Health (EH) is a corporate resource that provides leadership and Departmental management excellence to protect the workers, the public, and the environment. This commitment to excellence is demonstrated by continuously striving for improvement by: developing meaningful programs and policies; conducting independent oversight of environment, safety, health, and safeguards and security performance; and providing technical assistance, resources, and information sharing. Open communication, participation, and performance feedback on EH activities from affected parties are integral to EH's success. The hallmark and highest priority of all EH activities is daily excellence in the protection of the workers, the public, and the environment. The Office of Environment, Safety and Health defense activities are concentrated into three business functions within one decision unit: Oversight, Health Studies, and the Radiation Effects Research Foundation (RERF) support; and a program direction decision unit.

Oversight activities provide information and analysis needed to ensure that the Department of Energy (DOE) and contractor management, the public, the Secretary of Energy, and the Assistant Secretary for Environment, Safety and Health have an accurate, comprehensive understanding of the effectiveness, vulnerabilities, and trends of the Department's environment, safety, health, and safeguards and security policies and programs. These activities include the EH Residents program, Independent Evaluations, Accident Investigation, Analysis, Price-Anderson Amendments Act Enforcement, and the Departmental Representative to the Defense Nuclear Facilities Safety Board (DNFSB).

Health Studies activities include Occupational Medicine (medical surveillance); Epidemiologic Studies (surveillance and communication of worker injury and illness); Public Health Activities (health studies, health education and promotion, etc., at DOE sites); and International Health Programs (Marshall Islands program and health studies in the former Soviet Union).

Radiation Effects Research Foundation (RERF) activities support analysis of the medical effects of radiation with the intention of contributing to the maintenance of the health and welfare of atomic bomb survivors and to the enhancement of worldwide radiation protection practices and standards.

Program Goal

The goal of the EH Defense activities is to continually provide excellent Department-wide environment, safety, health, and safeguards and security support to:

- Provide consistent, multidisciplinary, credible independent oversight processes for evaluating the effectiveness of environment, safety, health, and safeguards and security programs.
- Promote actions that prevent recurrence of worker injuries, property damage and environmental damage due to accidents.
- Coordinate processes with field and program offices and report evaluation results to DOE senior management, the Congress, and the Defense Nuclear Facilities Safety Board.

- Ensure initiatives relative to environment, safety, health, and safeguards and security throughout the complex are analyzed and disseminated as appropriate.
- Ensure that follow-up and corrective actions for all EH oversight activities are effective.
- Ensure increased contractor accountability for safety through oversight of the Price-Anderson Amendments Act.
- Promote high quality workplace medical services to DOE and contractor employees.
- Use epidemiologic analysis and public health activities to examine associations between exposures or conditions at DOE sites and potential adverse health effects among groups of workers and offsite populations to develop appropriate public health responses.
- Manage the health and environmental programs in the Marshall Islands for those exposed to ionizing radiation.
- Expand the knowledge of dose-response relationships of health effects of radiation using workers and populations with unique exposure to radiation as a result of accidents or environmental contamination in the former Soviet Union.
- Continue United States participation in support of the Radiation Effects Research Foundation.

Program Objectives

- Identify, prioritize, and conduct evaluations to determine the effectiveness of the Department's environment, safety, health, and safeguards and security policies and programs by providing coordinated and consistent independent oversight to customers.
- Report evaluation results to DOE senior management, the Congress, and the Defense Nuclear Facilities Safety Board.
- Provide information to line management that helps improve the performance and effectiveness of the Department's Federal workforce and contractor employees in matters related to environment, safety, health, and safeguards and security.
- Conduct and/or monitor accident investigations with a focus on identifying systemic causes so that further accidents can be prevented.
- Encourage contractors to voluntarily comply with nuclear safety requirements by encouraging proactive contractor initiatives to identify deficiencies before actual problems occur.
- Collect, analyze and disseminate lessons learned and exemplary practices to improve performance and technical safety.
- Support the systematic collection, analysis, and sharing of data on worker injury and illness with the intent of detecting emerging health issues and evaluating the impacts of changes in health and safety practices at DOE sites.

- Develop and implement, in partnership with the Department of Health and Human Services, a consolidated and coherent strategy for public health activities at DOE sites, which includes a public health agenda for each site.
- Investigate the effects of radiation exposure on the exposed populations in the Marshall Islands.
- Investigate the effects of radiation exposure on the children and workers exposed by the Chernobyl accident and exposed populations in the former Soviet Union.
- Collect and analyze data on the effects of radiation exposure on the survivors of the bombings of Hiroshima and Nagasaki, Japan.
- Support studies to assess the health of the DOE workforce and of populations living near DOE sites in order to determine whether worker or community health has been negatively impacted by DOE operations and disseminate findings.
- Identify, address, resolve, and close management and technical issues in order to ensure protection of public health and safety.
- Provide information to line managers that helps to improve the performance and effectiveness of the Department's workforce and contractor employees in matters related to environment, safety, health, and safeguards and security.
- Provide occupational and environmental health information to DOE workers, DOE communities and the general public.

Performance Measures

Performance measures are primarily qualitative rather than quantitative. However, some performance measures are:

- Downward trends in the numbers of previously identified environmental releases that reoccur.
- Decreased rates of occupational injury and illness.
- Downward trends in the recurrence of accidents.
- Increased customer satisfaction with oversight priorities, timeliness, consistency, and quality.
- Significant reductions in recurrence of environment, safety, health, and safeguards and security issues.
- Decreased radiological exposures and number of nuclear safety violations.
- Identification of at-risk worker populations and employment of appropriate mitigation measures to avoid adverse health outcomes by implementing a program that will establish systematic linkages between job and task analyses, exposure assessments, medical monitoring, and epidemiological analysis. Continue shift from a reactive approach to emphasizing excellence and prevention in protecting worker and public safety and health.
- Initiation of investigation of reported health concerns within 30 days of identification.

- Satisfaction of former workers that issues surrounding their potential for occupationally-related disease are being addressed.
- Reduced number of outstanding actions and commitments for resolving environmental, health and safety issues identified by the Defense Nuclear Facilities Safety Board.
- Through studies of international populations, increased information defining the relationship between ionizing radiation dose and its effect on human health.
- Increased stakeholder satisfaction with access to information on DOE public and occupational health initiatives.
- Through studies of DOE community and worker population, increased information defining the relationship between exposures resulting from DOE facility operations and their effects on human health

Significant Accomplishments and Program Shifts

The Department has consolidated the management of Health Studies in the Office of Environment, Safety and Health to provide a focal point for ensuring that the results of these efforts are used for the maximum benefit of DOE workers and communities. The funding for these programs continues to be split between the Other Defense Activities and the Defense Environmental Restoration and Waste Management appropriations.

Significant Accomplishments and program shifts are defined within the respective business line description that follows.

Funding Profile

(dollars in thousands)

	FY 1998 Current Appropriation	FY 1999 Original Appropriation	FY 1999 Adjustments	FY 1999 Current Appropriation	FY 2000 Request
Other Defense Activities					
Operating Expenses					
Oversight	14,015	11,700	0	11,700	12,775
Health Studies ^a	45,985	41,031	0	41,031	40,956
RERF	14,000	14,000	0	14,000	13,500
Program Direction	20,000	24,769	0	24,769	24,769
Subtotal, Other Defense Activities	94,000	91,500	0	91,500	92,000
Use of prior year balances	-476	0	-2,108 ^b	-2,108	0
Total, Other Defense Activities	93,524	91,500	-2,108	89,392	92,000

Public Law Authorization:

Public Law 83-703, "Atomic Energy Act of 1954"

Public Law 100-408, "Price-Anderson Amendments Act of 1988"

^aIn addition, Public Health Activities were funded (\$12 million in FY 1999 and \$20 million in FY 2000) in the Defense Environmental Restoration and Waste Management Appropriation.

^bAllocated share of the congressionally prescribed general reduction in the Other Defense Appropriation.

Funding by Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Albuquerque Operations Office					
Pantex	150	150	150	0	0.0%
Sandia National Laboratories	185	185	185	0	0.0%
Los Alamos National Laboratory	270	270	270	0	0.0%
Albuquerque Operations Office	113	65	65	0	0.0%
Total, Albuquerque Operations Office	718	670	670	0	0.0%
Chicago Operations Office					
Brookhaven National Laboratory	1,810	1,810	1,810	0	0.0%
Chicago Operations Office	500	600	600	0	0.0%
Total, Chicago Operations Office	2,310	2,410	2,410	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Env. Laboratory	150	150	150	0	0.0%
Nevada Operations Office					
Bechtel Nevada	2,410	2,410	2,410	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	40	40	40	0	0.0%
Lawrence Livermore National Laboratory	3,153	3,200	3,200	0	0.0%
Oakland Operations Office	20,725	21,800	21,800	0	0.0%
Total, Oakland Operations Office	23,918	25,040	25,040	0	0.0%
Oak Ridge Operations Office					
Oak Ridge Institute for Science & Education	2,508	2,600	2,600	0	0.0%
Oak Ridge National Laboratory	230	480	480	0	0.0%
Oak Ridge Operations Office	1,400	0	0	0	0.0%
Total, Oak Ridge Operations Office	4,138	3,080	3,080	0	0.0%
Ohio Field Office					
Fluor Daniel Fernald	25	25	25	0	0.0%
Richland Operations Office					
Pacific Northwest National Laboratory	3,813	4,000	3,400	-600	-15.0%
Hanford Environmental Health Foundation	50	50	50	0	0.0%
Richland Operations Office	1,661	1,300	1,300	0	0.0%
Total, Richland Field Office	5,524	5,350	4,750	-600	-11.2%
Rocky Flats Field Office					
Kaiser Hill Co.	1,140	1,200	1,200	0	0.0%
Rocky Flats Field Office	25	25	25	0	0.0%
Total, Rocky Flats Field Office	1,165	1,225	1,225	0	0.0%
Savannah River Operations Office	400	50	50	0	0.0%
All Other Sites					

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Headquarters	53,242	51,090	52,190	+1,100	+2.2%
Subtotal, Defense	94,000	91,500	92,000	+500	+0.5%
Use of prior year balances	-476	-2,108 ^a	0	+2,108	+100.0%
Total, Defense	93,524	89,392	92,000	+2,608	+2.9%

^a Allocated share of the Congressionally prescribed general reduction in the Other Defense Activities appropriation.

Site Description

Albuquerque Operations Office

Albuquerque Operations Office is located on Kirtland Air Force Base in Albuquerque, New Mexico. The primary mission continues to be stewardship and maintenance of the Nation's nuclear weapons stockpile. In addition to the national security mission, the Operations Office also devotes significant resources to restoring and improving the environmental quality of operations. Albuquerque participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Los Alamos National Laboratory

Los Alamos National Laboratory (LANL), located in the town of Los Alamos approximately 35 miles northwest of Santa Fe, New Mexico, is a national resource for solving complex scientific problems. LANL provides materials to communicate beryllium health risks and assists in the development of a test for screening of chronic beryllium disease through the collection and transmission of worker health, exposure, and demographic data at the site.

Pantex Plant

Pantex Plant, located on a 16,000-acre site on the High Plains of the Texas Panhandle, northeast of Amarillo, Texas, is America's only nuclear weapons assembly and disassembly facility. Pantex participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Sandia National Laboratories

Sandia National Laboratories' main laboratory is located on Kirtland Air Force Base in Albuquerque, New Mexico. Sandia participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Chicago Operations Office

Chicago Operations Office, Chicago, Illinois, is responsible for overseeing the operation of contractor-operated, multi-program laboratories such as Argonne National Laboratory, near Chicago, and Brookhaven National Laboratory. Technical support is provided to the Headquarters staff for the Departmental Representative to the Defense Nuclear Facilities Safety Board (DNFSB). The representative coordinates and tracks the resolution of findings and recommendations from the DNFSB.

Brookhaven National Laboratory

Brookhaven National Laboratory is located in Upton, New York on Long Island. As a non-defense research institution, BNL is dedicated to basic and applied investigation in a multitude of scientific

disciplines. BNL participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site and provides support to the EH medical line management program.

Idaho Operations Office

Idaho Operations Office, Idaho Falls, Idaho, uses applied engineering to clean up the cold war legacy, execute multi-program missions, and the Idaho National Engineering and Environmental Laboratory's expertise with emerging technology to meet the Nation's needs.

Idaho National Engineering and Environmental Laboratory

Idaho National Engineering and Environmental Laboratory (INEEL) is located 44 miles outside of Idaho Falls, Idaho. Lockheed Martin Idaho Technologies Company, as the prime contractor, participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Nevada Operations Office

Nevada Operations Office, Las Vegas, Nevada, oversees and takes responsibility for the operations and programs of the Nevada Test Site. DOE Nevada maintains the capability at the Nevada Test Site and other facilities and sites to implement DOE initiatives in stockpile stewardship, crisis management, waste management, environmental, safety, and health management and programs, as well as supporting other DOE programs.

Bechtel Nevada

Bechtel Nevada manages operations at the Nevada Test Site and its related facilities and laboratories. Bechtel Nevada participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site and provides logistical support for medical care delivery to the Rongelap and Utirik exposed populations in the Marshall Islands.

Oakland Operations Office

Oakland Operations Office, Oakland, California, has multi-program expertise in the following areas: national security; environment, safety and health; and biomedical/environmental sciences. Oakland's core competencies to support the success of these programs include: program/project execution; laboratory contract management; environment, safety, health, and safeguards and security oversight; and business operations support. Oakland provides technical assistance in awarding grants and cooperative agreements in support of the Marshall Islands medical program, the Former Workers Program, and the International Health Studies program (i.e., Radiation Effects Research Foundation, Marshall Islands, and dosimetry studies).

Lawrence Berkeley Laboratory

Lawrence Berkeley Laboratory, Berkeley, California, pursues basic and applied research that advances the frontiers of science and solves a broad spectrum of national problems. It is a multi-program laboratory that serves the Nation's needs in technologies and environment, safety and health activities. Lawrence Berkeley Laboratory provides continuing support for the Comprehensive Epidemiologic Data Resource project.

Lawrence Livermore National Laboratory

Lawrence Livermore National Laboratory (LLNL) is located in California's Tri-Valley region east of San Francisco provides continuing support to the Marshall Islands program by providing environmental sampling and analysis to determine the radiological conditions at the affected atolls.

Oak Ridge Operations Office

Oak Ridge Operations Office, Oak Ridge, Tennessee, is responsible for research and development, defense programs, environmental management, and environment, safety and health activities. There are three major plant complexes on the Oak Ridge Reservation: Oak Ridge National Laboratory; Y-12 Plant; and the East Tennessee Technology Park, as well as the Oak Ridge Institute for Science and Education and the American Museum of Science and Energy.

Oak Ridge Institute for Science and Education

Oak Ridge Institute for Science and Education (ORISE) is a Department of Energy facility managed and operated by Oak Ridge Associated Universities. It is a resource for science education programs to train the workforce in health, safety, and security, emergency preparedness and response, and radiological site characterization activities. ORISE also provides technical expertise to the follow-up study of beryllium workers throughout the DOE complex; provides EH support to REAC/TS (Radiation Emergency Accident Center/Training Site); and support to the Former Workers program. ORISE will also support the medical monitoring of former radiation workers at Rocky Flats.

Oak Ridge National Laboratory

Oak Ridge National Laboratory (ORNL), Roane County, Tennessee, is a multi-program science and technology laboratory. Scientists and engineers at the laboratory participate and support environment, safety, and health activities; increase the availability of clean, abundant energy; restore and protect the environment; and contribute to national security. ORNL assists with the beryllium rulemaking task that was begun in FY 1998.

Ohio Field Office

Ohio Field Office is comprised of the Fernald Area Office, the Miamisburg Area Office, the West Valley Area Office, the Ashtabula Area Office, the Columbus Area Office, and the Ohio Support Office (also

located at Mound Plant in Miamisburg, Ohio). The Ohio Field Office develops strategies to control lost-time accidents and worker's compensation claims, and implements a team approach to ensure a safe work ethic. The Ohio Field Office is responsible for environmental restoration, waste management, and other programmatic activities at its four area offices. The Ohio Field Office ensures that the environment and the health and safety of DOE employees, contractor employees, and the general public are protected.

Fluor Daniel Fernald

Fluor Daniel Fernald is a global engineering, construction and diversified services corporation located in Cincinnati, Ohio. In August 1992, DOE awarded Fluor Daniel Fernald a five-year cleanup contract with a two-year contract extension in December 1997. The company is responsible for managing Fernald's environmental restoration activities, including managing existing waste, as well as any waste generated during cleanup activities, and the safe handling and processing of raw materials and products resulting from past operations at Fernald. This includes all environment, safety and health activities. The company participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Richland Operations Office

Richland Operations Office, Richland, Washington, manages waste products; develops, applies, and commercializes technologies; manages environment, safety and health activities; and supports cleanup and environmental restoration. Richland also provides technical support to the U.S. Transuranium Registries for the study of biokinetics of transuranium radionuclides in humans to evaluate high priority cases and publish results of radiochemical analyses, and supports international health study efforts.

Hanford Environmental Health Foundation

Hanford Environmental Health Foundation (HEHF), Richland, Washington, provides occupational health services through health risk management and occupational health services to personnel at Hanford. Through these services, HEHF strives to maximize the health and safety of Hanford personnel while minimizing personnel and occupational health risks. HEHF participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL), Richland, Washington, develops and delivers new and effective environment, safety and health technologies. PNNL also provides technical support in preparing policies, procedures, and guides, as well as developing materials that address the oversight process and protocols that are used for program implementation, planning, analysis of evaluation results and trends, and compilation of policy issues related to the evaluations. PNNL also provides technical support for recurring safety management evaluations, safeguards and security inspections, as well as site profile development, accident investigations, and other special studies and reviews. PNNL also assists in tracking and trending corrective action, developing and disseminating lessons learned, and tracking issues related to the program for follow-up and analysis. PNNL provides support to the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site, and the international health studies program.

Rocky Flats Field Office

Rocky Flats Field Office, Golden, Colorado, is responsible for managing waste and materials, cleaning up and converting the Rocky Flats Environmental Technology Site to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure and cost-effective. The Rocky Flats Office supports the Beryllium Workers Health Surveillance Program and the Former Radiation Worker Surveillance Program including screening and diagnostic medical evaluations for chronic beryllium disease to former employees participating in the program.

Kaiser-Hill Company

Kaiser-Hill Company, Golden, Colorado, is responsible for the management of the Rocky Flats site and team integration. The company participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

Savannah River Site

Savannah River Site, Aiken, South Carolina, is responsible for serving the national interest by ensuring that programs, operations and resources are managed in a safe, open and cost-effective manner to: support current and future national security requirements; reduce the global nuclear proliferation danger; protect and restore the environment while managing waste and nuclear materials; and conduct mission-supportive research and technology development. Savannah River Operations provides technical support to the epidemiologic surveillance program through collection and transmission of worker health, exposure, and demographic data at the site.

All Other Sites - Headquarters (Includes Commercial Contracts, Other Federal Agencies, and Universities)

The evolving short term needs for national-level expertise in a multitude of disciplines can best be met through the use of contractors who can rapidly respond to the continually changing skill mix required of EH across the DOE complex. Contract support is also more practical and cost-effective to provide a surge pool of technical expertise effectively and efficiently. In addition, contractors provide legal, technical, and analytical services to support the investigation of alleged violations of the Price-Anderson legislation.

Contractors also provide technical expertise in conducting oversight activities at DOE facilities. These activities include inspections, safety management evaluations, safeguards and security evaluations, special studies, site profiles, and analyses utilizing specialized technical expertise to obtain an appropriate skill mix and surge capability.

Under a Memorandum of Understanding, the Department of Health and Human Services provides support to DOE in health studies of DOE workers and communities around DOE sites. Wire payments are made to various agencies and institutions of the former Soviet Union to continue work performed by the International Health Studies office.

Oversight

Mission Supporting Goals and Objectives

The mission of the independent Oversight program is to provide the information and analysis needed to ensure that the Secretary of Energy, Assistant Secretary for Environment, Safety and Health, Department and contractor management, Congress, workers, unions, and the public have an accurate and comprehensive understanding of the effectiveness, vulnerabilities, and trends of the Department's environment, safety, health, safeguards and security policies and programs. The primary goal of the Office of Oversight is to be a catalyst that promotes constructive change in the Department's environment, safety, health, safeguards and security management programs. This goal is accomplished by: providing an independent evaluation and analysis of the status of environment, safety, health, safeguards and security programs; accurately reporting the status to DOE managers and other constituents; and conducting timely follow-up activities to validate that appropriate corrective actions are being taken.

The Office of Oversight conducts independent assessments that are reported directly to DOE senior management and Congress. These reviews are a critical aspect of DOE's ability to verify that it can protect the environment, workforce, and public. The reviews can be a key factor in DOE management decisions about contracts or the future of DOE facilities (e.g., the decision to terminate the Brookhaven contract). Accordingly, the independent oversight mission receives intense scrutiny and must perform with a high level of excellence. Therefore, it must use national-level experts that have unquestioned credentials for its ongoing inspection and evaluation efforts.

In essence, the Office of Oversight needs the technical support of national-level experts that are at least comparable to Federal personnel at the excepted service level. While EH has some unique, national-level experts, only a few are available to support oversight activities. Further, because of the nature of the activities, contract support continues to be more practical and cost-effective to provide a surge pool of technical experts than expanding the Federal oversight staff for a number of reasons:

- Peak loads associated with onsite inspections make it more effective and efficient to use contractor personnel who are tasked only when needed.
- The need for evaluators with national-level expertise in over 50 different technical disciplines (ranging from industrial hygiene to nuclear material control and accountability) is more efficiently provided by contractors. The needs for various technical expertise are continually evolving and frequently change as new needs are identified (e.g., the Brookhaven tritium contamination prompted a need for expert-level groundwater modeling personnel). Such evolving needs can best be met through use of contractors as the Federal staff and personnel systems are unable to rapidly respond to the continually changing skill mix.

Similarly, because of the nature of Oversight activities and the intense scrutiny that Oversight is under, Oversight reviews must be performed in a manner that is demonstrably unbiased. A critical aspect of an unbiased review is that Oversight's personnel must be able to participate without even the perception of a conflict of interest. The EH staff (i.e., non-Oversight staff) perform technical assistance activities and thus have a significant potential bias in that they would be in the position of evaluating their own work

and/or advice. Such conflicts of interest present a significant problem to using EH staff to support Oversight assessments.

The mission of the independent oversight program is accomplished through the following key activities:

EH Residents provide real time feedback on the status of field environment, safety, health, safeguards and security programs. The EH Residents evaluate performance through a comprehensive surveillance program, follow-up and verify closure of identified deficiencies, and provide regular updates on the status of corrective actions and upgrades.

Evaluations of environment, safety, health, safeguards and security policies and implementation of policies by DOE line management organizations are performed. Evaluations are an independent assessment of Departmental performance against orders, standards, policies, and other pertinent regulations, with a particular emphasis on DOE line management performance with respect to the Department's integrated safety management policy.

Accident Investigation Program ensures that accidents occurring at DOE sites are adequately investigated such that root causes are determined, lessons learned are disseminated, and corrective actions are implemented and verified. The Office of Oversight conducts systematic investigations of the most serious (Type A) accidents and guides and monitors the conduct of less serious accidents (Type B) that are performed by the field elements. The Office of Oversight also provides guidance for performing investigations and performs analysis of trends and precursors.

Analysis ensures the integrated collection, analysis, and dissemination of results of oversight activities. The oversight analysis activity analyzes data obtained from oversight evaluations, provides the information necessary to plan and schedule evaluation efforts, and maintains the supporting infrastructure elements to ensure that adequate follow-up is performed at DOE sites.

Enforcement provides oversight of the Price-Anderson Amendments Act enforcement activities of the Department. This primarily includes conducting investigations and technical evaluations of DOE contractors performing nuclear operations at DOE sites that are indemnified under the Price-Anderson Amendments Act. Contractors are encouraged to be proactive in identifying and correcting nuclear safety deficiencies to minimize enforcement actions.

Defense Nuclear Facilities Safety Board (DNFSB) Liaison provides effective cross-organizational leadership in resolving Board-related technical and management issues necessary to ensure public health and safety. This office represents the Secretary in regular and continuing interactions with the Board, and advises the Secretary, Deputy Secretary, Under Secretary, Secretarial Officers, and other Department Executives of the Board's priorities, concerns, actions and plans.

The following commitments made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy have been accomplished:

- ▶ Through independent oversight, provide information and analysis of the effectiveness, vulnerabilities, and trends of the Department's ES&H and safeguards and security policies and programs to the Secretary and senior line management.
- ▶ Consider stakeholder concerns in formulating oversight evaluations; and provide stakeholders with the result of EH's independent oversight studies.

Significant Accomplishments

EH Residents

- The EH Residents continue to collect beneficial data from numerous sources and at sites they are assigned to monitor. They consistently tour the facilities, respond to events, identify safety concerns, provide real-time updating, and communicate with line management. They have performed over 200 comprehensive EH Resident surveillances and follow-up activities, including following up on occurrence reports, accident investigations, and Office of Oversight evaluations, reviews and special studies. The process has matured and developed which leads to efficiencies in operations. (FY98: \$500; FY99: \$350; FY00: \$350)
- Develop methods and procedures for collecting, collating, evaluating, and retrieving data in the field. The EH Residents have well-developed procedures and processes that define how they do business. This included the development of an “issues tracking system” designed to track issues identified as the result of EH Residents surveillance activities, occurrence reports, accident investigations, and Office of Oversight evaluation and review activities. (FY98: \$100; FY99: \$50; FY00: \$50)
- Provide information to DOE management on problem areas by performing special reviews, such as the EH Residents review of radiation protection effectiveness across the Department’s complex. Perform other special reviews as needed to increase the effectiveness of EH Residents oversight and follow-up of issues identified as the result of Office of Oversight activities. (FY98: \$100; FY99: \$100; FY00: \$100)
- Provide input to the 20 site profiles maintained by the Office of Oversight. The profiles are updated twice each year and validated with field managers by the EH Residents to ensure accuracy. The profile updating process, which includes EH Residents participation, provides a consistent and uniform approach for maintaining an accurate and current profile of the status of hazards, strengths, weaknesses, and upgrades at key DOE facilities. Additionally, the profiles provide a basis for DOE-wide priorities and focus assessments on significant problems and trends. This was the first comprehensive compendium of environment, safety, and health issues at DOE facilities. The process has matured and streamlined for cost-effective operations.
 - ▶ Subsequent efforts provided field-validated input to site profiles for additional facilities and expanded the scope to include safeguards and security issues.
 - ▶ Continued monitoring field activities, participated in planning and conduct of comprehensive evaluations, and provided input to maintain the site profiles. Published the weekly summary of major EH Residents issues provided to senior DOE managers and to the Secretary of Energy’s staff. Continued follow-up activities to ensure DOE managers have current and validated information. Program recognized complex-wide as an important element in a comprehensive system of oversight, site profiles, monitoring, follow-up, and continual updating of status. (FY98: \$200; FY99: \$100; FY00: \$100)

Evaluations

- Conduct environment, safety, and health (ES&H) evaluations consisting of reviews of 4-6 major sites per year using the integrated safety management system policy and the safety management template as a framework for evaluating line management performance. Promote improvements in line management, reliability of safety systems, and programs essential to ES&H. Evaluations have identified and continued to identify significant, systemic ES&H vulnerabilities. They have provided a clear, positive benefit to the Department through safety risk and liability reduction, significant cost reductions, and the elimination of unwise expenditures. These evaluations are the Department's comprehensive and integrated approach to internal independent oversight of DOE and contractor line management. (FY98: \$3,100; FY99: \$3,100; FY00: \$3,100)
- Conduct an ongoing program of safeguards and security evaluations and site profiles of major sites each year, which determines the effectiveness of the protection of nuclear weapons components, special nuclear material, and classified and sensitive information. Through the development of safeguards and security profiles, the Office of Oversight has maintained a comprehensive baseline of safeguards and security programs throughout the Department. By applying the guiding principles of safety management, safeguards and security evaluations and site profiles have been enhanced. (FY98: \$1,900; FY99: \$1,900; FY00: \$1,900)
- Perform special reviews and studies of policies, programs, and their implementation in the field to identify program an be corrected. Streamlining of operations has produced cost effective results. (FY98: \$1,100; FY99: \$1,000; FY00: \$1,000)
- Continue to conduct the first systematic follow-up program designed to determine the effectiveness of actions taken to correct weaknesses identified as the result of oversight evaluations or resulting from accident investigations. Particular attention is placed on sites previously identified as having significant ES&H problems, such as Los Alamos, Brookhaven, Rocky Flats, and Hanford. Follow-up activities are particularly important in implementing accountability of line management for ES&H performance and in protecting the environment and ensuring the safety and health of workers and the public. Data from this program are used to develop site profiles for senior DOE managers in site-specific decisionmaking. Procedures for follow-up activities have been re-vamped for efficiency and conduct of operations. (FY98: \$3,300; FY99: \$2,200; FY00: \$2,200)
- Continue the qualification standards program. Office of Oversight personnel achieved greater than 90 percent of the qualification standards during the first year. Personnel development and requalification programs are ongoing. (FY98: \$240; FY99: \$150; FY00: \$150)
- Continue the certification program for safeguards and security personnel by administering challenging certification tests designed to demonstrate safeguards and security topical knowledge and the ability to apply that knowledge to real-world problems. (FY98: \$100; FY99: \$100; FY00: \$100)
- Continue to revise and refine evaluation methods and procedures that focus on the principal elements of the integrated safety management program that include line management accountability, clear roles and responsibilities, technical competence, balanced priorities, identification of safety standards and requirements, hazard controls, and operations authorization.

This also includes the dissemination of useful tools to increase the effectiveness of field programs. (FY98: \$400; FY99: \$350; FY00: \$350)

- Conduct an ongoing program of environmental audits in compliance with the Executive Order, “Greening the Government Through Leadership Environmental Management.” As part of this compliance audit function, facility level environmental regulatory audits, routine environmental regulatory compliance audits, environmental management systems audits, audits of compliance with toxic release inventory reporting and emergency planning and reporting requirements will all be conducted. (FY98:\$00; FY99: \$00; FY00: \$800)
- Develop and maintain a safety management template and a comprehensive set of performance objectives and criteria that consistently promote and reinforce effective application of the safety management principles. The template, performance objectives and criteria are periodically updated and enhanced to increase the effectiveness of the Office of Oversight evaluation program. (FY98: \$100; FY99: \$100; FY00: \$100)

Accident Investigation Program

- Conduct Type A accident investigations at DOE facilities. This is accomplished with a focus on management systems to achieve the ultimate objective of preventing accidents and injuries. Continue streamlining and enhancing the accident investigation program to be more effective in reducing accidents (e.g., reports that focus on lessons learned) and more useful to management (e.g., streamlined reporting procedures that result in more concise reports in a shorter period of time). Continue to update policies and procedures and to enhance the investigative process. (FY98: \$100; FY99: \$100; FY00: \$100)
- Continue a program to present accident investigation techniques, revise methods for implementing the accident investigation program, develop functional program materials for DOE Headquarters and field personnel, identify precursors to accidents including a review of the Type B accident investigations performed by the field, disseminate lessons learned, and follow-up on corrective actions. (FY98: \$200; FY99: \$200; FY00: \$200)

Analysis

- Develop and maintain a core analysis capability solely dedicated to the analysis of data collected by Office of Oversight activities and available from Departmental databases and other sources. It includes subject matter expertise, policy analysis, coordination of follow-up efforts, data analysis, and reporting (including annual reports and special papers). Provide analytical information to keep the Office of Oversight, DOE Headquarters, and field managers informed and, ultimately, to help improve ES&H and S&S programs at DOE facilities. Identify trends and issues that are beneficial to the Office of Oversight in its evaluation planning and scheduling efforts. The process has matured and developed providing efficiencies of operations. (FY98: \$650; FY99: \$400; FY00: \$400)
- Develop a program infrastructure that provides for an effective independent oversight program, including policies and procedures, handbooks, information management systems, and tools. Develop an electronic document management and tracking system that provides for retention,

storing, and tracking of Office of Oversight documents, as well as linkage to DOE information databases and other information sources. (FY98: \$100; FY99: \$100; FY00: \$100)

- Develop a comprehensive certification program, including office-specific qualification program standards, and appraisal analysis of management systems. Program has been developed. (FY98: \$150; FY99: \$0; FY00: \$0)
- Develop 20 site profiles. Update and disseminate the site profiles based on input from EH Residents, Office of Oversight evaluations and reviews, and other sources. The Office of Oversight ensures that the most significant issues and findings at all key sites, and the status of their corrective actions, are documented in the site profiles. The site profiles are revised twice each year. (FY98: \$100; FY99: \$100; FY00: \$100)

Enforcement

- In cooperation with DOE Field and Program Offices, conduct the Price-Anderson Amendments Act Enforcement program at each DOE nuclear site and perform nuclear safety enforcement activities. Perform Price-Anderson-related investigations and technical evaluations of DOE nuclear safety requirements involving DOE indemnified contractors utilizing a process that provides for an orderly transition to an external enforcement regulator in the future. Encourage contractors to proactively identify and correct nuclear safety deficiencies using an enforcement approach similar to the commercial nuclear industry. Increased on-site reviews need to be conducted for a more robust nuclear safety enforcement program. (FY98: \$975; FY99: \$800; FY00: \$975)

Defense Nuclear Facilities Safety Board Liaison

- Coordinate the Board recommendation process through line organizations by developing responsive implementation plans, resolving technical and management issues, completing commitments, and ultimately closing recommendations. Historically, the Department receives 4-5 major Board recommendations each year and is actively working 15-20 open recommendations. Also, the Board activities and actions will increase. (FY98: \$200; FY99: \$150; FY00: \$200)
- Manage the Department's interface activities and provide direction and advice to line managers on Board-related matters. Participate in, and manage preparation and follow-up for over 300 annual meetings and site visits between Department staff and Board staff. (FY98: \$150; FY99: \$150; FY00: \$150)
- Coordinate responses to Board reports and inquiries. Manage the Department's Safety Issues Management System (SIMS) for Board-related issues, commitments, and actions, which tracks over 1000 Department commitments and actions related to Board recommendations and other correspondence. (FY98: \$100; FY99: \$100; FY00: \$100)
- Maintain the Department's central repository of official Board communications and make this information available to Department and contractor personnel complex-wide. Annually, 250-350 pieces of Board/Department correspondence are received and addressed. This information is available to the public on the Internet. Over 1400 pieces of Board/Department correspondence are available on the web site in multiple file formats for customer convenience. Documents are

posted in 1-3 business days to facilitate action. The Board activities and actions will increase.
 (FY98: \$150; FY99: \$100; FY00: \$150)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
EH Residents	900	600	600	0	0.0%
Evaluations	10,240	8,900	9,700	+800	9.0%
Accident Investigation	300	300	300	0	0.0%
Analysis	1,000	600	600	0	0.0%
Enforcement	975	800	975	+175	+21.9%
DNFSB Liaison	600	500	600	+100	+20.0%
Total, Oversight	14,015	11,700	12,775	+1075	9.2%

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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EH Residents

- The primary functions of the EH Residents, comprehensive and systemic surveillances and follow-up activities of evaluation results, are well established. They provide the day-to-day, real time monitoring of environment, safety, and health (ES&H) and safeguards and security (S&S) activities at the sites, as well as the follow up of corrective actions associated with previously identified issues and deficiencies. Experience since late 1994 and the application of zero-based budgeting procedures have demonstrated that this funding level is appropriate with increased efficiencies in operations. These on-site functions of data collection will continue to be key to the independent oversight program well into the future. Particularly with regard to the performance measures, increased customer satisfaction relative to timeliness, consistency, quality, and the reduction in recurrence of ES&H and S&S issues. Environment, safety, and health are identified as one of the three areas critical to the success of the Department's business lines identified in its strategic plan

	500	350	350
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- To accomplish its mission, the Office of EH Residents have developed methods and tools to collect data and provide for real-time updating of issues. An "issues tracking system" was developed early on and, through experience, has proven to be invaluable. Other methods and procedures utilized in the Resident program are well developed, such as surveillances which coincide with major site issues working with the Field Managers. This funding level is considered appropriate for sustaining and continuing to improve these important operational mechanisms. The funding level was primarily derived through experience and zero-based budgeting techniques. The methods and procedures for collecting data are key to effective mission accomplishment and, in turn, help ensure the safety and health of workers and the public

	100	50	50
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ Special reviews conducted by the EH Residents have provided important insights for the independent oversight program and for the DOE. By pooling their collective knowledge and experience, the Residents are particularly qualified to conduct special reviews in the field which will become even more important in the future as the program continues to improve. These reviews, which are topical in nature like the radiation protection special review requested by the Defense Nuclear Facilities Safety Board, along with the follow-up activities, are considered essential. The funding level is considered appropriate and was derived through recent experience—radiation protection reviews and a review of the Department’s Computerized Accident/Injury reporting system (CAIRS)—and zero-based budgeting techniques. These functions are directly linked to the performance measures, particularly decreased radiological exposures and number of nuclear safety violations, and the decreased rates of occupational injury and illness. These also are important objectives outlined in the EH strategic plan.	100	100	100
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Provide field input to the Office of Oversight site profiles that provide a consistent and uniform approach for maintaining an accurate and current profile of the status of hazards, strengths, weaknesses, and upgrades at key DOE facilities. Provide a basis for DOE-wide priorities and focus assessments on significant problems and trends. In subsequent efforts, provide field-validated input to site profiles for additional facilities and expand the scope to include safeguards and security issues. Development and semiannual updating is one of the most important Office of Oversight innovations, and the EH Residents provide the most important means of obtaining accurate information for maintaining the site profiles. The profiles are recognized Department-wide and have become an important tool in effectively accomplishing the independent oversight mission. Therefore, the funding level is considered appropriate in maintaining this important effort and increasing its effectiveness in the years to come. The funding level was determined through extensive experience in producing the 20 profiles (i.e., obtaining data, updating, validating the profiles with the field, and publishing) and in comparison with mission requirements and other oversight products to ensure cost-effectiveness, timeliness, consistency, and quality. The profiles not only provide important information relative to key sites, but also identify issues and the status of the issues at these sites. Using the profiles as a baseline, trends can be identified (e.g., environmental releases, recurrence of accidents, corrective action effectiveness, etc.) that assist in accomplishing the goals outlined in the EH strategic plan.

200	100	100	
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Total, EH Residents	900	600	600

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Evaluations

- Conduct an ongoing program of environment, safety, and health evaluations of 4-6 major sites per year. Office of Oversight identify, and continue to identify, significant, systemic ES&H vulnerabilities. These evaluations serve as the Department’s comprehensive and integrated approach to internal, independent oversight of DOE and contractor line management. They provide a clear, positive benefit to the Department through safety risk and liability reduction, significant cost reduction, and the elimination of unwise expenditures. In short, these comprehensive evaluations have become the focal point of the independent oversight program in the areas of environment, safety and health. The funding level is based on experience in conducting the evaluations, as well as zero-based budgeting determinations. Integrated management evaluations of ES&H programs directly relate to the performance measures relative to ES&H issues, oversight priorities, injury and illness, and the safety and health of workers and the public. Environment, safety, and health is one of the three areas critical to the success of the DOE business lines outlined in the DOE strategic plan. 3,100 3,100 3,100
- Conduct an ongoing program of safeguards and security evaluations consisting of reviews of major sites each year. These oversight functions, that directly relate to DOE’s national security interest outlined in its strategic plan, are well developed. They predate the Office of Oversight by over eight years in the form of the Office of Security Evaluations, incorporated as part of the Office of Oversight in late 1994. The funding level has been developed over a long period of time, through numerous budget preparations, and is well established. The funding level is appropriate, and therefore, represents a continuation of this important program, the only one of its kind in the Department. The program has directly contributed to significant reductions in recurrence of safeguards and security issues and is linked to fulfilling the national security responsibilities outlined in the strategic plans, specifically: to effectively support and maintain a safe, secure, and reliable enduring stockpile. 1,900 1,900 1,900

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Special studies and reviews have been an important part of the Office of Security Evaluations and, later, the Office of Oversight. Issues and problems not normally covered by the more traditional oversight functions (i.e., safety management evaluations, safeguards and security inspections, EH Residents surveillances and follow-up activities, and analysis efforts) are often referred to the Office of Oversight. For example, reports have included the Molten Salt Reactor Experiment, Occurrence Reporting Programs within DOE, the Aviation Safety Review, the Brookhaven National Laboratory Tritium Plume Interim Review, the Employee Assistance Program Referral Option Review, and the Emergency Management Review. All are examples of the kinds of reviews and special studies conducted by the Office of Oversight that have contributed to a particular issue in which senior DOE managers were interested. This has been a recurring and appropriate function for the independent oversight program, a program best suited to provide an unbiased evaluation of a particular Departmental issue. The funding level is appropriate especially with increased efficiencies of operations, and is determined over time through experience in dealing with the more non-traditional type of oversight reviews and studies—over 38 reviews and special studies since late 1994. This function is linked to increased customer satisfaction with oversight priorities, timeliness, consistency, and quality. Also, by providing senior managers with an independent view of particular issues, this function directly supports DOE’s four business lines listed in its strategic plan: energy resources, national security, environmental quality, and science and technology.

1,100 1,000 1,000

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ The certification program is specifically designed for safeguards and security personnel and focuses on “certification.” The program is well developed, and its funding level has been determined over a long period of time and through numerous budgeting efforts. The certification of safeguards and security inspectors directly relates to the Office of Oversight mission of conducting safeguards and security evaluations, maintaining safeguards and security profiles on key DOE sites, and providing senior DOE management with an independent view of the status of safeguards and security policies and programs throughout the complex.	100	100	100
■ As a direct result of the experiences and expertise developed within the Office of Oversight, it is able to provide tools and share information (handbooks, videotapes, and lessons learned) with numerous organizations within the Department. This is an important “information sharing” effort carried out by an organization in an ideal position to do so. The funding level has been determined by experience and by the expressed needs of the ES&H and S&S communities. The funding level is important and appropriate. The function has much to do with sharing lessons learned and is tied directly to performance measures relating to trends, consistency, and quality of oversight products. The function enhances the independent oversight program and directly contributes to the ES&H and S&S goals of EH and the Department as expressed in the strategic plans.	400	350	350

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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<ul style="list-style-type: none"> <p>■ Conduct an ongoing program of environmental audits in compliance with the Executive Order, “Greening the Government Through Leadership in Environmental Management.” These evaluations serve as the Department’s comprehensive and integrated approach to compliance with environmental regulations for Executive Agencies. Requirements of the Executive Order that will be accomplished are: development and implementation of a regulatory compliance audit program; facility level environmental regulatory compliance audits; routine environmental regulatory compliance audits or environmental management systems audits (every three years); reviews and audits of compliance with toxic release inventory reporting and emergency planning and reporting requirements; and updating audit protocols with the requirements of DOE’s environmental management systems. Some environmental areas for review are toxic release inventory and emergency planning, environmental monitoring, pollution prevention effectiveness, waste characterization.</p> 	0	0	800
<ul style="list-style-type: none"> <p>■ The comprehensive set of performance objectives and criteria is a primary tool used to ensure consistency and thoroughness in the conduct of ES&H reviews and integrated safety management evaluations. The template was originally developed by the Office of Oversight and has received Department-wide recognition. The performance objectives and criteria provide the detail necessary to carry out the oversight evaluations. The funding level is appropriate and was derived since the creation of the Office of Oversight in late 1994 and as the result of numerous safety management evaluations and individual efforts. The funding level is well developed and directly relates to ES&H issues mentioned in the performance measures. Specifically, a significant reduction in recurrence of ES&H issues, satisfaction with oversight quality, and ensuring the safety of workers and the public. The template, performance objectives, and criteria have proven extremely valuable in fulfilling the mission of the Office of Oversight and, therefore, directly relate to the successful accomplishment of the goals listed in the EH and DOE strategic plans</p> 	100	100	100
<p>Total, Evaluations</p>	10,240	8,900	9,700

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Accident Investigation

■ The DOE Accident Investigation Program was assigned to the Office of Oversight in 1995. Since then, the program has been streamlined. Accidents are now responded to in a highly coordinated, timely, and focused manner. The funding level was determined by experience with the new, streamlined program, by zero-based budget processes, and by comparison to the previous program, which was much more costly. The functions related to the program link directly to the downward trend in the recurrence of accidents performance measure. Also, the program is linked to the strategic plans relative to worker safety and environmental quality..	100	100	100
■ Develop functional program materials and present accident investigation techniques and revised methods for implementing the accident investigation program to DOE Headquarters and field personnel. These materials have been developed or updated (i.e., the DOE Order) since the program was transferred to the Office of Oversight. The effort was successful and is appropriate. The information is incorporated into the Office of Oversight's analysis effort to provide a comprehensive program. The funding level was determined through experience and the actual cost of developing the necessary materials and methods used in fulfilling the goals of the program. This program is now well established and will continue to be enhanced in the years to come.	200	200	200
Total, Accident Investigation	300	300	300

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Analysis

■ The Office of Oversight has developed a core analysis capability solely dedicated to the analysis of data collected by oversight activities and available from Departmental databases and other sources. The analysis data feeds into all oversight activities for planning purposes. The funding level was established based on experience and a mature process providing for efficiencies in operations of streamlining activities and by zero-based budget techniques. The effort directly links to all performance measures relating to measuring trends in ES&H and S&S and other areas of interest. Additionally, the analysis group enables the Office of Oversight to better focus its resources and its evaluations efforts.	650	400	400
■ Develop and maintain the independent oversight program infrastructure, including procedures, handbooks, information management systems, and tools.	100	100	100
■ Developed the infrastructure and programmatic guidance for the comprehensive certification program that includes the technical qualification program standards and appraisal analysis of management systems.	150	0	0
■ Develop, disseminate, and update the site profiles based on input from the EH Residents, Office of Oversight evaluations and reviews, and other sources	100	100	100
Total, Analysis	1,000	600	600

Enforcement

■ Continue to conduct approximately 10 full field investigations resulting in formal enforcement actions involving Notices of Violation related to Price-Anderson Amendment Acts enforcement activities.	975	800	975
Total, Enforcement	975	800	975

Defense Nuclear Facilities Safety Board Liaison

■ Coordinate the Board recommendation process.	200	150	200
■ Manage the Department's interface activities.	150	150	150
■ Coordinate responses to Board reports and inquiries....	100	100	100

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ Maintain the Department's central repository of official Board communications.	150	100	150
Total, Defense Nuclear Facilities Safety Board Liaison	600	500	600
Total, Oversight	14,015	11,700	12,775

Explanation of Funding Changes from FY1999 to FY2000

	FY 2000 vs. FY 1999 (\$000)
Evaluations	
■ Conduct an on going program of environmental audits in compliance with the Executive Order, "Greening the Government Through Leadership in Environmental Management."	+800
Enforcement	
■ Conduct increased site and emphasis on a more robust nuclear safety enforcement program	+175
Defense Board Liaison	
■ Responding to Board actions based on increased activities	+100
Total Funding Change, Oversight	+1,075

Health Studies

Mission Supporting Goals and Objectives

The Health Studies program promotes the health and safety of DOE's workers and communities surrounding Department sites, and supports studies to understand the effects of radiation and other hazards associated with the DOE operations on humans. It is comprised of four programs: Occupational Medicine, Public Health Activities, Epidemiologic Studies, and International Health Programs. Additional funding for Public Health Activities is included in the Defense Environmental Restoration and Waste Management Appropriation.

Occupational Medicine provides the Department's occupational medicine clinics with policies, guidance and tools necessary for them to identify and track occupationally related health effects among worker populations, effectively communicate to workers the reasons for and results of medical testing and surveillance conducted, and identify opportunities to prevent or mitigate work-related injuries and illnesses.

Public Health Activities support health studies, health education and promotion, and other public and occupational health related initiatives at DOE sites pursuant to a consolidated and coherent strategy which includes a public health agenda for each site. Community and worker health studies are conducted in partnership with the Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry (ATSDR) under a Memorandum of Understanding (MOU) with the Department of Health and Human Services (HHS). This program supports studies to assess the health of populations living near or working at DOE sites in order to determine if the health of workers and nearby communities has been impacted by DOE operations. Information from the health studies is communicated to the DOE workforce, line management and community stakeholders. Additional funding for this initiative is found in the Defense Environmental Restoration and Waste Management portion of this budget.

Epidemiologic Studies collect worker injury and illness surveillance data on the current workforce needed to identify emerging worker health issues associated with job exposures and to evaluate the impact of health and safety practices at DOE facilities. This program includes communication of occupational and environmental health information to DOE workers, DOE communities, and the general public. The program facilitates interventions that reduce or eliminate worker risks and provides a means to evaluate these corrective actions once implemented.

International Health Programs provide health and environmental programs in the Marshall Islands for those populations and land areas exposed to radioactive fallout from the U.S. atmospheric nuclear testing program in the Pacific. In addition, research programs are supported to expand the knowledge of radiation health effects among workers and populations exposed to ionizing radiation as a result of accidents or environmental contamination in the former Soviet Union and Spain.

Significant Accomplishments

Occupational Medicine

Medical Surveillance of Current and Former Workers

- Provide medical monitoring for current and former DOE employees at risk for occupational disease, particularly chronic beryllium disease. Plan and implement expanded medical surveillance and disease prevention and exposure control programs across DOE sites for workers who have been exposed to beryllium. Continue to support the research and innovation in exposure assessment and medical surveillance. Continue support for DOE former workers program, in response to Section 3162 of the Defense Authorization Act of 1993, by conducting the second phase of the ongoing pilot program at ten DOE sites for evaluating the health of former workers who may be at significant risk due to past occupational exposures. (FY98: \$9,650; FY99: \$10,681; FY00: \$10,681)
 - ▶ Complete an additional four needs assessments for establishing the basis of a more detailed program of medical follow-up and, at six sites, begin to implement a medical surveillance program for former workers.
- Continue testing and demonstration of the Medical Surveillance Information System (MSIS). (FY98: \$900; FY99: \$850; FY00: \$850)

As part of this program, the following commitment made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy has been accomplished:

- ▶ Through a pilot linkup with the Y-12 site, demonstrate capability of the relational software developed as part of the Medical Surveillance Information System (MSIS) to allow DOE occupational medicine staff (and other Headquarters and site health professionals) to look at worker cohorts and analyze site-wide and complex-wide worker health trends.
- Continue technical assistance visits to site occupational medicine clinics to support Operations Office efforts in providing direction in the efficient delivery of quality occupational medical services. Serve as a focal point for communication within the Department on occupational health by preparing and disseminating health risk and protection data and facilitating the sharing of information between and among research and operating organizations. Update and revise the occupational medicine section of DOE Order 440.1, "Worker Protection Management for DOE Federal and Contractor Employees." Complete medical standards rulemaking for the Personnel Assurance Program; the Protective Force Medical Standards (10 CFR 1046), and the Personnel Security Assurance Program (10 CFR 710). Continue to survey DOE sites on the degree of workplace violence, prepare a Departmental workplace violence policy for Secretarial issuance, and establish a repository for workplace violence information and analysis. Provide occupational medicine expert consultation and specific studies to address concerns associated with the operation of DOE site occupational medicine programs. Issue guidance for the medical aspects of the site Contractor Employee Assistance Program. (FY98: \$485; FY99: \$400; FY00: \$400)
- Continue to assist DOE with the Radiation Emergency Accident Center/Training Site (REAC/TS) support. (FY98: \$300; FY99: \$300; FY00: \$300)

Public Health Activities

- Continue collaboration in epidemiologic studies conducted under the Memorandum of Understanding (MOU) with the Department of Health and Human Services (HHS), including environmental dose reconstruction projects at major DOE sites, single and multi-site cancer mortality studies of DOE workers, and community outreach and educational efforts. As part of this collaboration, develop a credible, coherent DOE/HHS public and occupational health agenda of activities at DOE sites. Conduct workshops and meetings with stakeholders as part of the agenda-setting process. Two million dollars was included in FY 1998 for the Hanford Thyroid Disease Study, which was completed at the end of that fiscal year. (FY98: \$16,000; FY99: \$13,900; FY00: \$13,825)

As part of this program, the following commitment made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy has been accomplished:

- ▶ Develop a coordinated health agenda with the Department of Health and Human Services that is responsive to stakeholder and customer needs.

Epidemiologic Studies

- In FY 1998, studies conducted under the State Health Agreement Program were completed and the program was ended. (FY98: \$4,000; FY99: \$0; FY00: \$0)
- Continue epidemiologic surveillance of DOE workers; add the Oak Ridge Reservation to the epidemiologic surveillance program; add selected dosimetry information to epidemiologic surveillance data collection; analyze data collected by DOE for other purposes to determine their potential value for, and use in, epidemiologic analyses; make reports and health information available through the Comprehensive Epidemiologic Data Resource and through other Internet access; publish findings in annual epidemiologic surveillance reports; provide briefings and written materials to stakeholders on completed studies; identify emerging health issues requiring evaluation and conduct follow-up investigations; and continue communication activities with affected workforces and communities. (FY98: \$2,050; FY99: \$2,300; FY00: \$2,300)

Under this program, the following commitments made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy have been accomplished:

- ▶ Expand the current ten-site illness and injury surveillance program for current workers to include the major three facilities at the Oak Ridge Reservation.
- ▶ Complete the review of site epidemiological records that are prohibited from destruction because of their potential use in health studies and identify those series of records that no longer need to be maintained.
- ▶ Establish and maintain a database of FY 1998 access issues and problems relating to health research at DOE sites in order to provide detailed and accurate information for analyzing what kinds of access problems remain and how to solve them.
- Continue national and international efforts to analyze biokinetic parameters for deposition and retention of transuranics in humans to improve dosimetry models and occupational radiation

standards. Publish approximately ten peer-reviewed articles documenting research findings, including one that characterizes a new dosimetry model for americium-241. (FY98: \$1,000; FY99: \$1,000; FY00: \$1,000)

International Health Programs

Marshall Islands

- Provide special medical care and necessary environmental monitoring in the Marshall Islands. Provide medical surveillance and care for the Rongelap and Utirik populations exposed to fallout from the Castle Bravo atmospheric nuclear test in 1954 and provides environmental monitoring and dose assessment for the Bikini, Enewetak, Rongelap and Utirik atolls, which were most heavily contaminated by fallout from the U.S. nuclear weapons testing in the Pacific. These activities are mandated by Public Law 99-239, the Compact of Free Association Act of 1986. (FY98: \$6,800; FY99: \$6,800; FY00: \$6,800)

Under this program, the following commitments made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy have been accomplished:

- ▶ Award and implement a New Cooperative Agreement for Medical Care Delivery in the Marshall Islands.
- ▶ Make available 10,000 documents related to Nuclear Weapons Testing in the Marshall Islands on the Internet.

European Programs

- Continue, in collaboration with the National Cancer Institute, long-term leukemia, thyroid disease and ocular cataract studies of the Chernobyl accident. (FY98: \$1,500; FY99: \$1,500; FY00: \$1,500)
- Continue U.S.-Russian collaborative research efforts involving the conduct of full-scale cohort studies in the South Ural region to investigate the health effects on workers and local populations associated with radiation exposures from the operations of the Mayak weapons facility in Russia. Begin support of molecular epidemiology, biomarker, and biological tissue bank projects. (FY98: \$3,000; FY99: \$3,000; FY00: \$3,000)

Under this program, the following commitments made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy have been accomplished:

- ▶ Complete microfilming of the epidemiological and radiation health records associated with the Mayak Production Association in Russia.
- Continue U.S. collaboration with Spain in the Project Indalo program of environmental surveillance and medical monitoring for the effects of plutonium contamination. (FY98: \$300; FY99: \$300; FY00: \$300)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Occupational Medicine	11,335	12,231	12,231	0	0.0%
Public Health Activities	16,000	13,900 ^a	13,825 ^b	-75	-0.5%
Epidemiologic Studies	7,050	3,300	3,300	0	0.0%
International Health Programs					
Marshall Islands	6,800	6,800	6,800	0	0.0%
European Programs	4,800	4,800	4,800	0	0.0%
Total, International Health Programs	11,600	11,600	11,600	0	0.0%
Total, Health Studies	45,985	41,031	40,956	-75	-0.2%

^aIn addition, \$12 million for Public Health Activities was funded in the Defense Environmental Restoration and Waste Management Appropriation in FY 1999.

^bIn addition, \$20 million for Public Health Activities was funded in the Defense Environmental Restoration and Waste Management Appropriation in FY 2000.

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Occupational Medicine

Medical Surveillance of Current and Former Workers

- In light of the number of cases of chronic beryllium disease in the DOE workforce, expand the current program of medical screening of former workers exposed to beryllium to complete screening of all former workers at 16 sites where beryllium was used but testing has not been conducted to date. Pilot programs conducted at Rocky Flats and Y-12 facilities provide the basis for estimating the costs of identifying, locating and screening beryllium-exposed former workers for the additional sites to be added to this program. Continue program to support research and innovation in the early detection of sensitization to beryllium in DOE workers.

Continue support for policy development and execution of a beryllium disease prevention and exposure control program for current and future workers exposed to beryllium with the objective of: defining operational safety parameters; establishing improved medical surveillance programs; and facilitating information exchange for the prevention of chronic beryllium disease.

Continue support for the DOE former workers program, in response to Section 3162 of the Defense Authorization Act of 1993, by conducting the second phase of the ongoing pilot program of 10 projects at 9 DOE sites for evaluating the health of former workers which may be at significant risk due to past occupational exposures. This pilot program will cover approximately one quarter of all the DOE sites and approximately 5 percent of the workforce. The budget requested for FY 2000 allows all ten ongoing projects to continue in the medical monitoring phase (Phase II).

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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The full scale deployment of the pilot program is justified on the basis that all the initial Phase I reports identified groups of former DOE workers at each site with significant exposures to selected hazards. Experience from the conduct of the initial 6 Phase II pilot projects have provided the basis for establishing the budgets necessary for full scale program deployment. This portion of the program will be completed by the end of FY 2002. More detailed descriptions of individual medical surveillance projects can be found at the end of this document.

Under this program, the following commitments made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy will be accomplished:

▶ Continue to survey current and former workers for sensitivity to exposure to beryllium and the presence of chronic beryllium disease.			
▶ Survey selected former workers and workplace hazards pursuant to Public Law 102-484, Section 3162, to examine possible links between hazardous substances and exposures during work and their adverse health effects.	9,650	10,681	10,681
■ Conduct pilot demonstrations of the Medical Surveillance Information System (MSIS) at Oak Ridge (Y-12 and K-25), Savannah River, Allied Signal-Kansas City, Sandia, Rocky Flats, and Morgantown Energy Technology Center sites. Automated linkage of employee medical, exposure and job information into a single record is a critical component in the ability of DOE health professionals to identify and, where appropriate, intervene in emergent site-wide and complex-wide worker health problems. Such relational data bases do not currently exist within the DOE complex, and the MSIS must be tested and demonstrated at a variety of sites using actual site data to verify its validity and ensure its adoption and use. After successful demonstration of the system during the pilot phase, a cost-sharing arrangement with sites will be developed to implement complex-wide linkage of the MSIS by FY 2003. After the system becomes fully operational, annual costs will be limited to those necessary for system maintenance and upgrades.	900	850	850

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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■ Continue level of effort support of Operations Offices in their efforts to provide efficient delivery of quality occupational medicine services to workers. Develop implementation guidance for the revised occupational medicine section of DOE Order 440.1, "Worker Protection Management for DOE Federal and Contractor Employees." Continue to play a central role in facilitating communication and coordination among the occupational medicine clinics and occupational health researchers in the complex by sponsoring meetings, establishing web sites, and facilitating formal and informal communications which help disseminate information from health studies and surveillance projects.	485	400	400
■ Continue level of effort support of the Radiation Emergency Accident Center/Training Site (REAC/TS) program which provides rapid response medical expertise and training to address radiological accidents. Such a capability is of continuing importance, particularly in light of the opening of the Waste Isolation Pilot Plant and the potential for accidents associated with the transport of transuranic waste to New Mexico	300	300	300
Total, Occupational Medicine	11,335	12,231	12,231

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Public Health Activities

- Continue occupational and community health studies at and around DOE sites under the Department of Health and Human Services (HHS) Memorandum of Understanding (MOU). As long-time DOE workers and residents near DOE facilities age, there will likely be an increased ability to detect late health effects of exposures associated with DOE operations. The results of a number of studies conducted to date have suggested the need for further research designed to help understand the long-term health impacts of exposure to low levels of radiation. The program of occupational and community studies conducted by HHS under its MOU with DOE offers an expanded basis upon which radiation protection standards and practices can be refined and improved. By engaging in a joint agenda setting process, DOE and HHS have worked together to develop a coherent, credible set of research priorities across the DOE complex. This agenda will be an invaluable tool in determining which studies are critical to pursue in both the near and long term. DOE's FY 2000 request enables the Department to provide only about two-thirds of the level of funding for projects which HHS has recommended to DOE for FY 2000

16,000	13,900	13,825	
Total, Public Health Activities	16,000	13,900	13,825

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Epidemiologic Studies

■ The State Health Agreement program was concluded at the end of FY 1998, and no further funding is requested..	4,000	0	0
■ Continue the ongoing program of epidemiologic surveillance to enhance DOE's ability to protect worker health by monitoring the health of active workers and identifying potential health risks and occupational illnesses. Ongoing health monitoring of workers in this multi-site program provides a mechanism to improve the understanding of health effects associated with work at DOE sites. The program facilitates communication of this improved understanding to workers. Epidemiologic surveillance also facilitates evaluation of the effectiveness of risk reduction efforts through its ongoing monitoring of health trends. The program supports the Department's only multi-site health information database linked to current workers and has contributed to the development of automated medical data management systems at several DOE sites. Key features of the program include a review of the health of women in the DOE workforce, development of automated health data management and industrial hygiene exposure data systems at several participating sites, and continue operation of the Comprehensive Epidemiologic Data Resource and other internet sites to ensure dissemination of health information to DOE workers, DOE communities, and the general public. The budget request will support an expanded surveillance system which includes incorporation of all three facilities at Oak Ridge into the overall program and will provide an enhanced capability to assess worker health in relation to occupational radiation exposures by increasing the collection of dosimetry data and their integration into the system.	2,050	2,300	2,300

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Continue support of the U.S. Transuranium and Uranium Registries (USTUR), a major component of DOE's long-standing programs to develop and refine radiological protection standards that are in world-wide use to help ensure a safe workplace. The Registries have become a unique resource of data, capabilities and materials for studying the deposition, biokinetics and dosimetry of long lived, alpha-emitting materials, including uranium and plutonium, in humans. Based on voluntary enrollment of occupationally exposed individuals, the Registries perform postmortem radiochemical and histopathologic analyses of donated tissues to obtain data fundamental to determining internal doses and bioeffects due to intake of these radioactive materials. Continued evaluation and refinement of biokinetic models is essential to demonstrate that occupational doses are being appropriately calculated. Another important capability of the USTUR is its provision of assistance and consultations to other U.S. and foreign researchers, governmental agencies and the public on the modeling and measurement of internal depositions. This is facilitated by the Registries' function as a repository of donated tissues, histopathology slides, similar tissues and materials from animal studies, and associated databases to ensure their availability for use by all interested researchers. The provision of these services in an academic setting maximizes both openness and cost-effectiveness. The budget request is based on experience in running the program to date, the waiting list of donors, and the continued demand for and use of the Registries analytical capabilities.

	1,000	1,000	1,000
Total, Epidemiologic Studies	7,050	3,300	3,300

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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International Health Programs

Marshall Islands

- Continue the provision of mandated special medical care and ensure full follow-up on diseases potentially associated with radiation exposure resulting from the nuclear tests in the Marshall Islands. Utilize a new medical contractor to deliver year around community-based medical services that encourage community involvement and provide more extensive medical care for the Rongelap and Utirik exposed populations. Continue characterization of the residual levels of radionuclides in the environment, development of mitigation strategies to reduce uptake of these radionuclides in local food products, and monitor individual dose assessments needed by the local atoll communities to make informed decisions on plans to resettle the Bikini and Rongelap Islands. 6,800 6,800 6,800

European Programs

- Continue support of Chernobyl-related health effects studies. Combined, the long-term leukemia, thyroid disease and ocular cataract studies of populations and workers affected by the Chernobyl accident represent the largest prospective research of the health effects of environmental exposure to radiation outside of the study of Japanese A-bomb survivors. They involve the medical monitoring of a large number of people known to be exposed to high levels of radiation and offer a basis for the development of better tools for assessing populations at risk and improved radiation standards for workers and the general populations. In particular, the thyroid disease studies in Ukraine and Belarus will provide valuable information relevant to populations living downwind from Hanford, the Nevada Test Site, and other DOE sites, as well as populations throughout the U.S. who were exposed to radioiodine (I-131) as a result of atmospheric testing of nuclear weapons. The Joint Coordinating Committee for Civilian Nuclear Reactor Safety (JCCCNRS) recently signed 30-year protocols calling for U.S. participation (DOE and NCI) for these three long-term studies through FY 2026.. . . . 1,500 1,500 1,500

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Continue the Joint Coordinating Committee for Radiation Effects Research (JCCRER) program in collaboration with Russia and other U.S. agencies. This program continues to have the potential for a very strong return on investment by providing, within the next several years, a continuing source of new information on the effects of chronic exposure to low dose rate radiation. This information will ultimately be important for setting worker and public radiation protection standards. The focus of ongoing JCCRER efforts is epidemiologic and dose reconstruction studies based on worker and population radiation health data. Six major environmental and occupational health studies are underway. In addition, valuable records are currently being preserved on microfilm. It is anticipated that ongoing DOE-supported epidemiologic and dose reconstruction studies will continue through April 2000. The microfilming effort, which is included in the Secretary's performance agreement with the President, is expected to continue through FY 2000 and to result in the filming of an estimated 3 million pages of critical records. Additionally, DOE issued a request for applications in June 1997 for new U.S.-Russian collaborative population-bases studies (to build on ongoing work) related to molecular epidemiology, biomarkers, biological tissue banks, and epidemiology. All current projects are scheduled to be completed by FY 2003. In contrast to DOE's support of studies of Japanese atomic bomb survivors, which has been ongoing for over 50 years, analysis of available Russian data has just begun. The outcomes of this research will determine whether and what kind of future work will be conducted.

Under this program, the following commitment made in the Performance Agreement between the Assistant Secretary for Environment, Safety and Health and the Secretary of Energy will be accomplished:

▶ Continue Support of Health Impact Analyses of Russian Workers and Communities Exposed to Relatively High Radiation Levels As a Basis for Validating Current U.S. and DOE Radiation Protection Standards	3,000	3,000	3,000
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(dollars in thousands)

FY 1998	FY 1999	FY 2000
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- Continue the Project Indalo program which consists of environmental surveillance and medical monitoring conducted since 1966. Over 800 residents have been tested throughout the 31-year program. Since 1984, approximately 150 different people are tested annually; about 50 may have been internally contaminated. In the summer of 1998, the U.S. and Spain chartered a four-person panel of outside, independent experts who reviewed and summarized the scientific and technological aspects of the program in Palomares and made recommendations on future directions for the program. Based on these recommendations, the program's work has been revised to address a more focused set of environmental and medical concerns..

	300	300	300
Total, European Programs	4,800	4,800	4,800
Total, International Health Studies	11,600	11,600	11,600
Total, Health Studies	45,985	41,031	40,956

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

Public Health Activities

Funding is decreased by \$75K. This is not a significant change	-75
Total Funding Change, Health Studies	-75

Radiation Effects Research Foundation (RERF)

Mission Supporting Goals and Objectives

The United States has supported studies for the past 50 years on the health effects of radiation on the survivors of the Hiroshima and Nagasaki atomic bombings. The Atomic Bomb Casualty Commission (ABCC) began studies in 1947, funded by the Atomic Energy Commission, with the National Academy of Sciences as the support services grantee responsible for setting up and running the laboratories in accordance with a U.S. presidential directive. In April 1975, the Radiation Effects Research Foundation (RERF) was established as the full successor to the ABCC and was designated to continue the research according to an agreement between the governments of the United States and Japan.

The DOE is committed to the support of the atomic bomb survivor studies as long as valuable health effects information is to be gained by further follow-up of the survivors. Approximately 64,000 survivors are currently being followed in the RERF studies.

Significant Accomplishments

- Continue RERF program research. Data obtained at the RERF is used for radiation risk assessment by various national and international agencies, and is used to update and verify radiation protection standards throughout the world. No epidemiologic study of late radiation effects has been as informative or influential as that of the A-bomb survivors, and the world scientific community has a stake in maintaining the strength of the RERF program. In 1996, an International Blue Ribbon Panel's report was released that made recommendations on current and future research at the RERF. The Panel's report identified specific aspects of the RERF program as having direct benefits to Japanese A-bomb survivors, and subsequently the Japanese government assumed responsibility for funding these parts of the program. (FY98: \$14,000; FY99: \$14,000; FY00: \$13,500)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
RERF	14,000	14,000	13,500	-500	-3.6%
Total, RERF	14,000	14,000	13,500	-500	-3.6%

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000
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Radiation Effects Research Foundation (RERF)

<ul style="list-style-type: none"> ■ Continue RERF research program and implement Blue Ribbon Panel recommendations which include improvement of the peer review system and increased international cooperation and training opportunities at the RERF. Cooperatively, with the National Academy of Sciences, implement a long-term funding and management strategy for the RERF. In FY 2000, the Department will be in the fourth year of a five-year funding arrangement with Japan's Ministry of Health and Welfare.. 	14,000	14,000	13,500
Total, Radiation Effects Research Foundation	14,000	14,000	13,500

Explanation of Funding Changes from FY 1999 to FY 2000

	FY 2000 vs. FY 1999 (\$000)
RERF	
<ul style="list-style-type: none"> ■ \$500K reduction due to increased efficiencies at RERF and implementation of Blue Ribbon Panel recommendations 	-500
Total Funding Change, Radiation Effects Research Foundation	-500

Environment, Safety and Health - Other Defense Activities

Program Direction

Mission Supporting Goals and Objectives

Program Direction in this account provides overall direction and support for the Office of Environment, Safety and Health (EH) defense programs to ensure that all operations are conducted in the most efficient, effective manner.

Program Direction in this account has been grouped into the following categories:

Salaries and Benefits provide funding for a Federal staff (FY98: 200 FTE; FY99: 226 FTE; FY00: 221 FTE) who have the technical expertise required to carry out the essential EH mission. The EH mission requires experts to: develop overall environment, safety and health policy for DOE sites and facility operations; provide a central and coordinated source of technical expertise to all field elements; provide a central clearing house for information, analysis and feedback regarding new efforts, present activities, and unforeseen occurrences taking place at the multitude of diverse facilities within the DOE complex; provide the Department with independent oversight capability, as well as health studies endeavors; and perform activities relative to environment, safety and health programs across the DOE complex.

Travel includes all costs of transportation, subsistence, and incidental travel expenses of EH's Federal employees in accordance with Federal Travel Regulations. This also includes travel costs associated with a permanent change of duty station.

Support Services are not provided for in this decision unit, consistent with Congressional direction.

Other Related Expenses includes training for Federal staff.

Significant Accomplishments

Salaries and Benefits

- Salaries and Benefits funding requirements support EH staff working on Defense activities. Overall, salaries and benefits are in line with the full-time-equivalents (FTE) requested and include the 4.1% Economic Assumption provided by the Office of Management and Budget (OMB). (FY98: \$19,500; FY99: \$23,485; FY00: \$23,285)

Travel

- Travel requirements are consistent with support for the EH Federal staff and include the 2.1% Economic Assumption as provided by the OMB. (FY98: \$500; FY99: \$1,284; FY00: \$1,284)

Other Related Expenses

- Includes tuition costs for EH Federal employees. (FY98: \$0; FY99: \$0; FY00: \$200)

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Headquarters					
Salaries and Benefits	19,500	23,485	23,285	-200	-0.9%
Travel	500	1,284	1,284	0	0.0%
Other Related Expenses	0	0	200	+200	--
Total, Program Direction	20,000	24,769	24,769	0	0.0%
Full-Time-Equivalents	200	226	221		

Detailed Program Justification

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
Salaries and Benefits			
<ul style="list-style-type: none"> ■ Salaries and Benefits reflect the FTE split between Energy Supply and Other Defense Activities. Overall, salaries and benefits include the Economic Assumption provided by the OMB. 	19,500	23,485	23,285
Travel			
<ul style="list-style-type: none"> ■ Overall, EH travel requirements are in line with the overall EH Federal staff. 	500	1,284	1,284
Other Related Expenses			
<ul style="list-style-type: none"> ■ Includes tuition costs for the EH Federal employees previously budgeted in Management and Administration. 	0	0	200
Total, Program Direction	20,000	24,769	24,769

Explanation of Funding Changes from FY 1999 to FY 2000

FY 2000 vs. FY 1999 (\$000)

Salaries and Benefits

- Requirements are commensurate with the allocation of Federal Staff between
 Other Defense Activities and Energy Supply Appropriations. -200

Training

- Previously budgeted in Management and Administration +200
- Total Funding Change, Program Direction 0

Other Related Expenses

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	\$ Change	% Change
Training	0	0	200	+200	--
Total, Other Related Expenses	<u>0</u>	<u>0</u>	<u>200</u>	<u>+200</u>	<u>--</u>