Corporate Context for Environmental Quality (EQ) Programs

This section on Corporate Context that is included for the first time in the Department's budget is provided to facilitate the integration of the FY 2003 budget and performance measures. The Department's Strategic Plan published in September 2000 is no longer relevant since it does not reflect the priorities laid out in President Bush's Management Agenda, the 2001 National Energy Policy, OMB's R&D project investment criteria or the new policies that will be developed to address an ever evolving and challenging terrorism threat. The Department has initiated the development of a new Strategic Plan due for publication in September 2002, however that process is just beginning. To maintain continuity of our approach that links program strategic performance goals and annual targets to higher level Departmental goals and Strategic Objectives, the Department has developed a revised set of Strategic Objectives in the structure of the September 2000 Strategic Plan.

The Department of Energy is committed to clean up sites across the country that supported the Nation's production and testing of nuclear weapons. The Office of Environmental Management (EM) is responsible for addressing the environmental legacy of nuclear weapons research, production, and testing and of DOE-funded nuclear energy and basic science research in the United States. During the Cold War, the nuclear weapons complex generated large amounts of waste, which pose unique problems--EM manages some of the most technically challenging and complex work of any environmental program in the world. By the end of FY 2003, EM plans to complete cleanup of at least 76 of the 114 contaminated geographic sites for which it has responsibility.

In addition to the environmental legacy of nuclear weapons production, the United States has growing inventories of commercial spent nuclear fuel currently stored at reactor sites in 33 States, and increasing inventories of spent fuel from nuclear-powered naval vessels. The Office of Civilian Radioactive Waste Management (RW) implements the Federal policy for permanent disposal of this spent nuclear fuel and of defense high-level radioactive waste.

The Department is committed to protect the health and safety of its workers, the public, and the environment in accomplishing its mission. The Office of Environment, Safety and Health (EH) is the Department's independent advocate in this highly visible and critical role. The Department also recognizes the need to address impacts on workers and communities as a result of changing missions. The office of Worker and Community Transition provides support in the form of retraining, placement assistance and grants to workers and communities that impacted by downsizing.

Environmental Quality (EQ) Goal

Aggressively clean up the environmental legacy of nuclear weapons and civilian nuclear research and development programs at 114 of the Department's sites, permanently dispose of the Nation's radioactive wastes, minimize the social and economic impacts to individual workers and their communities resulting from departmental activities, and ensure the health and safety of DOE workers, the public, and protection of the environment.

Strategic Objectives

EQ1: Safely and expeditiously manage waste; cleanup facilities and the environment; and stabilize and store nuclear material and spent nuclear fuel, with the intent to complete cleanup of 16 additional sites by the end of 2006 bringing the total number of sites cleaned to 92 out of the total 114. (EM)

EQ2: Complete the characterization of the Yucca Mountain site and, assuming it is determined suitable as a repository and the President and Congress approve, obtain requisite licenses, construct and, in 2010, begin acceptance of spent nuclear fuel and high-level radioactive wastes at the repository. (RW)

EQ3: Reduce the number of deaths, injuries and illnesses and environmental releases from environment cleanup and other operational activities such that DOE organization activities remain below their averages established by DOE's last five years of data for (1) Total Recordable Case Rate; (2) Occupational Safety Cost Index; (3) Hypothetical Radiation Dose to the Public; (3) Average measurable dose to DOE workers; and (5) Reportable Occurrences of Releases to the Environment. (EH)

EQ4: Assist DOE contract workers and communities that have been adversely affected as the result of downsizing or closing of Department facilities due to a change in, or termination of, program mission by providing (1) separation benefits comparable to industry standards while achieving annual savings that are three times the one-time cost of separation, and (2) creating and retaining jobs in the communities to absorb the displaced workers. (WT)

Budget Summary table

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Comparable Appropriation	FY 2003 Request
Office of Environmental Management (EM)			
Defense Appropriation Accounts (053)	$6,128,652	$6,464,760	$6,608,073
Non Defense Accounts (270)	283,842	234,797	106,154
(EQ1)	**6,412,494**	**6,699,557**	**6,714,227**
Office of Civilian Radioactive Waste (RW)			
Defense Nuclear Waste Disposal (053)	199,725	280,000	315,000
Nuclear Waste Disposal Fund (270)	192,906	97,278	212,045
(EQ2)	**392,631**	**377,278**	**527,045**
Office of Environmental Safety & Health (EH)			
Other Defense Activities (053)	119,170	100,223	99,910
Energy Supply Appropriation Accounts (270)	36,719	30,641	29,958
(EQ3)	**155,889**	**130,864**	**129,868**
Office of Worker & Community Transition (WT)			
Worker and Community Transition (053) (EQ4)	**41,899**	**19,825**	**25,774**
Interim Waste Storage Rescission (053)	-75,000		
Total, EQ	**6,927,913**	**7,227,524**	**7,396,914**

Environment, Safety and Health

Executive Summary

Mission

The Office of Environment, Safety and Health (EH) is committed to protect the health and safety of Department of Energy (DOE) workers, the public, and the environment. The EH goal is to leverage resources and skilled personnel to efficiently provide DOE's line management programs with the essential policies, information and analysis, and management tools required to promote safety and to protect the environment at DOE sites. Integral to EH's success is fostering increased awareness and accountability throughout the Department, open communications, and performance feedback on EH activities.

The Environment, Safety and Health program currently is funded in two appropriations: (1) Energy Supply and (2) Other Defense Activities. The Energy Supply EH program consists of: Policy, Standards and Guidance, DOE-Wide ES&H Programs, and a Program Direction decision unit that also includes the EH Working Capital Fund. The Other Defense Activities EH program includes: Corporate Safety Assurance, Domestic and International Health Studies programs, the Radiation Effects Research Foundation (RERF) program, Gaseous Diffusion Plants Initiatives, completed in FY 2001, Energy Employees Occupational Illness Compensation Program activities, and a Program Direction decision unit.

The Department of Energy, as a whole, has transitioned to new missions which include weapons dismantlement, environmental cleanup, facility decontamination and decommissioning, and long-term stewardship requiring innovative and dynamic safety and health programs rather than the comparatively more static "business-as-usual" required by routine operations. Residual hazards at DOE facilities, especially in the nuclear weapons complex, are the result of more than 55 years of nuclear materials production and processing under less than optimum conditions, the impacts of which are still being characterized. It constitutes the largest inventory of hazardous nuclear materials in the world outside of the former Soviet Union, and includes large quantities of hazardous chemicals. 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. There is still a lack of reliable data for many of these facilities on the most basic safety issues. Examples include non-compliant electrical and ventilation systems.

The EH mission is one of DOE's highest priorities. All workers involved participate in identification of standards and controls, work planning, and continuous improvement. Through its enforcement, policy and corporate environment, safety, and health programs, EH's role is to assure that responsibilities for program execution for environment, safety, and health activities reside with accountable line programs. EH activities are aimed at providing clear policy expectation and implementation guidance and standards; working models for integrating

environment, safety, and health into critical work venues; safety and health information and analysis to improve performance; and safety performance measurement.

The need for effective programs to identify environment, safety, and health concerns at the project and individual activity level remains urgent. The downsizing and realignment of the weapons production efforts necessitates changes in the conduct of operations at field sites. EH's analytical products are shared DOE-wide for appropriate and timely resolution of identified and emerging concerns.

In recognition of the efforts of the workers who served their country in the nuclear weapons complex, the Department of Energy has also made the health concerns of current and former workers a top priority. Based on the belief that these workers deserve to be taken care of, Congress passed the Energy Employees Occupational Illness Program Act of 2000 for workers who have illnesses associated with exposures that occurred during their employment at DOE facilities. In addition, DOE has placed a priority on expanding the medical monitoring of its former workforce to identify work-related illnesses.

Strategic Objectives

EQ3: Reduce the number of deaths, injuries and illnesses and environmental releases from environment cleanup and other operational activities such that DOE organization activities remain below their average established by DOE's last five years of data for (1) Total Recordable Case Rate; (2) Occupational Safety Cost Index; (3) Hypothetical Radiation Dose to the Public; (3) Average measurable dose to DOE workers; and (5) Reportable Occurrences of Releases to the Environment. (EH)

This strategic objective is supported by the Program Strategic Performance Goals that follow:

EQ3-1: Reduce the number of reportable deaths, injuries and illnesses and environmental releases from environment cleanup and other operational activities such that DOE organization activities remain below their averages established by DOE's last five years of data for five measures: Total Recordable Case Rate, the Occupational Safety Cost Index, the Hypothetical Radiation Dose to the Public, the average measurable dose to DOE workers, and the Reportable Occurrences of Releases to the Environment.

EQ3-2: Identify health concerns and priorities as related to environmental cleanup and other operational activities through assessing injuries and illnesses in at least 70,000 current workers across 12 DOE

sites and providing medical screening for at least 4,000 former workers exposed to beryllium and other hazards.

Performance Indicators/Measures:

- **Total Recordable Case Rate**: Recordable Case Rate measures work-related deaths, as well as injury or illness that results in loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment beyond first aid.
- **Occupational Safety Cost Index**: Occupational Safety Cost Index is a measure of the direct and indirect costs based on the Cost Index formula, due to safety-related injuries/illnesses.
- **Hypothetical Radiation Dose to the Public**: Hypothetical radiation dose to public is an estimate of the collective radiation dose to the public within 50 miles of DOE facilities due to airborne releases of radionuclides.
- **Worker Radiation Dose**: Worker radiation dose is calculated by dividing the collective total effective dose equivalent (TEDE) by the number of individuals with measurable dose.
- **Reportable Occurrences of Releases to the Environment**: Reportable occurrence of releases to the environment include releases of radionuclides, hazardous substances, or regulated pollutants that must be reported to Federal, State, or local agencies.
- Provide medical screening to a minimum of 4,000 DOE workers formerly exposed to beryllium, radiation, or other hazards during their employment at DOE facilities.
- Assess injuries and illnesses in at least 70,000 workers across 12 DOE sites.

Strategy

The intent of the Office of Environment, Safety and Health (EH) is to assure that quality, objectivity, responsiveness and innovation are hallmarks of all EH activities. The Office'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 Departmental activities is EH's strategic objective. To accomplish this objective, EH integrates and embeds sound environment, safety, and health management policies and practices into the performance of DOE's day-to-day work. EH helps to ensure that environment, safety, and health priorities are clearly identified and given appropriate consideration for funding. EH works with internal and external organizations to assure that DOE safety policies and practices are consistent with the work and the hazards. These policies and practices are based on best technologies and are consistent with similar commercial and governmental safety policies and practices.

Another 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 to determine priorities and solutions. As a growing priority, EH continues to focus on developing management-level environment, safety, and health analytical products that serve to disseminate critical environment, safety, and health information and establish a sound basis for decisionmaking.

EH serves its principal customers in the following major areas: (1) development of Departmental environment, safety, and health requirements, standards, guidance, and interpretations that are effective and efficient to guide program implementation; (2) provision of critical corporate environment, safety, and health services that include specialized technical information and analysis, a regulatory and industry interface to assure that DOE programs are benchmarked with the community to improve program management and execution, and provide support in the efficient and effective implementation of requirements; and (3) provision of environment, safety, and health information and performance analyses to increase both internal and public awareness, and assure that appropriate DOE and contractor management accountability to environment, safety, and health results are achieved.

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 is 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 is being 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-effective in nature. From a technical safety perspective, special emphasis is being 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 effective management of environment, safety, and health programs. 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. 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 continue 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 strategic use of contractors who can rapidly respond to the continually changing skills mix required of EH activities across the DOE complex.

The former workers medical surveillance program, required by 42 USC Section 7274 continues. Twelve projects at 11 current and former DOE operations or testing sites are currently being conducted by a consortia of universities, labor unions and health specialists. A project at the Pantex Plant was implemented in the Fall of 2001. Former workers in targeted occupational groups are located and, where indicated by an assessment of the hazards associated with their job(s), are offered a medical screening examination. Participants are provided with assistance for physician referrals for medical follow-up, as necessary. Information and education on occupational health risks is provided and assistance for obtaining available Federal and state workers' compensation benefits is offered. Examination results to date have provided evidence of pulmonary disease (including chronic beryllium disease, asbestosis, and silicosis), skin disease, hearing loss, and other possible work-related health conditions in those screened. This pilot program will cover high risk former workers at most of the major DOE sites and approximately 5 percent of DOE's former workforce.

DOE, in partnership with the Department of Health and Human Services (HHS), has developed a planning process for conducting public health activities across the DOE complex that includes a public health agenda for each DOE site. This process has 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 open and iterative planning strategy.

The Office of Environment, Safety, and Health has budgeted in FY 2003 for a lower level of FTE's, continuing the downward trend initiated in FY 2002. This action has been taken in concert with the Secretary's DOE-wide initiative to conduct the Department's mission in a more effective and efficient manner and to improve the management and effectiveness of the Department. The Program Direction requested also is consistent with the ceiling guidance provided for the OMB Budget and reflects the full funding of pension and annuitant health care benefits.

_____ _____

Date

Steven V. Cary
Acting Assistant Secretary
Environment, Safety and Health

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Energy Supply Operating Expenses					
Policy, Standards and Guidance	3,549	3,289	-210	3,079	3,546
DOE-Wide ES&H Programs	10,575	7,084	-1,332	5,752	6,794
OSHA Program	998	600	-40	560	0
Program Direction [a]	21,597	20,470	780	21,250	19,618
Subtotal, Energy Supply	36,719	31,443	-802 [b]	30,641	29,958
Other Defense Activities Operating Expenses					
Corporate Safety Assurance [c]	3,973	9,369	-4,000	5,369	4,232
Health Studies	52,473	57,819	0	57,819 [d]	48,160
RERF	13,354	13,500	0	13,500	13,500
Gaseous Diffusion Plants	11,973	0	0	0	0
Employee Compensation	16,963	15,000	0	15,000	16,000
Program Direction [e]	20,434	23,066	-3,300	19,766	18,018
Subtotal, Other Defense Activities	119,170	118,754	-7,300	111,454	99,910
Use of Prior Year Balances	0	-10,000	-1,231 [f]	-11,231	0
Subtotal, Other Defense Activities	119,170	108,754	-8,531	100,223	99,910
Total, Environment, Safety and Health	155,889	140,197	-9,333	130,864	129,868

[a]"The FY 2001 and FY 2002 columns of the FY 2003 Congressional Request include funding in the amount of $1,075,000 and $1,066,000, respectively, for the Governments share of increased costs associated with pension and annuitant health care benefits in EH Defense, and $896,000 and $943,000 respectively in EH, Energy Supply. These funds are comparable to FY 2003 funding of $869,000 and $749,000 respectively. (Note: The data is presented on a comparable basis as if the legislation had been enacted and implemented in FY 2001.)"

[b]$802,000 assigned as part of the Energy Supply $18,000.000 Congressional General Reduction.

[c]EH funding amounts for FY 2001 and the FY 2002 Request have been made comparable with the amounts deleted from the program in FY 2003 to reflect the Secretary's Initiative to consolidate Oversight activities in the Office of Independent Oversight and Performance Assurance.

[d]Provides for the following in FY 2002:
$5,000,000 for electronic records, U. of Nevada, Las Vegas
$1,750,000 for Epidemiologic Studies, U. of Louisville and U. of Kentucky
$1,000,000 for Amchitka Nuclear Weapons Test Site medical screening
$1,000,000 for Health Studies, Iowa Army Ammunition Plant

[e]Excludes funding for 24 FTE's in Other Defense Activities to support the Secretary's direction to consolidate the agency's Oversight responsibilities in the Office of Independent Oversight and Performance Assurance.

[f]$1,231,000 assigned as part of the Other Defense Activities $10,000,000 additional reduction in prior year balances.

Total, Excluding Full funding for Federal Requirements, ES&H	153,918	138,188	-9,333	128,855	128,252

Public Law Authorization:

Public Law 95-91 “Department of Energy Organization Act.”

Public Law 103-62, “Government Performance Results Act of 1993"

Public Law 106-398 “Energy Employees Occupational Illness Compensation Program Act of 2000"

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

National Defense Authorization Act of 1995

42 USC Section 7274 “Programs to Monitor Department of Energy Workers Exposed to Hazardous and Radioactive Substances”

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

Public Law 99-239, “Compact of Free Association Act of 1985"

Public Law 95-134 - Marshall Islands (Related to Rongelap and Utirik Atolls)

Public Law 96-205, “Trust Territory of the Pacific Islands”

Staffing Profile

(Whole FTEs)

	FY 2001 Comparable Appropriation	FY 2002 Comparable Appropriation	FY 2003 Request
Full Time Equivalents			
Energy Supply [a]	128	128	102
Other Defense Activities	162	161	131
Total, Full Time Equivalents	290	289	233

[a]Includes 6 FTEs for DOELAP in Idaho.

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque Operations Office					
Los Alamos National Laboratory	162	162	162	0	0.0%
Sandia National Laboratories	295	295	295	0	0.0%
Albuquerque Operations Office	388	388	388	0	0.0%
Total, Albuquerque Operations Office	845	845	845	0	0.0%
Chicago Operations Office					
Argonne National Laboratory	465	465	465	0	0.0%
Brookhaven National Laboratory	319	319	319	0	0.0%
Chicago Operations Office	698	698	698	0	0.0%
Total, Chicago Operations Office	1,482	1,482	1,482	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Environmental Laboratory	687	687	687	0	0.0%
Idaho Operations Office	850	850	850	0	0.0%
Total, Idaho Operations Office	1,537	1,537	1,537	0	0.0%
Nevada Operations Office	7,140	7,140	7,140	0	0.0%
Ohio Field Office	333	333	333	0	0.0%
Rocky Flats Field Office	300	300	300	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	280	280	280	0	0.0%
Lawrence Livermore National Laboratory	3,018	3,018	3,018	0	0.0%
Oakland Operations Office	29,174	29,174	29,174	0	0.0%
Total, Oakland Operations Office	32,472	32,472	32,472	0	0.0%
Oak Ridge Operations Office					
Oak Ridge National Laboratory	2,040	2,040	2,040	0	0.0%
Oak Ridge Operations Office	9,988	9,988	9,988	0	0.0%
Total, Oak Ridge Operations Office	12,028	12,028	12,028	0	0.0%
Richland Operations Office					
Pacific Northwest National Laboratory	1,885	1,885	1,885	0	0.0%
Richland Operations Office	1,323	1,323	1,323	0	0.0%
Total, Richland Operations Office	3,208	3,208	3,208	0	0.0%
Savannah River Operations Office	435	435	435	0	0.0%
All Other Sites					
Washington Headquarters	96,109	82,315	70,088	-12,227	-14.9%
Use of Prior Year Balances	0	-11,231	0	11,231	100.0%
Total, Environment, Safety and Health	155,889	130,864	129,868	-996	-0.8%

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 through: developing meaningful programs and policies; conducting independent reviews of environment, safety, and health performance; and providing technical services, 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 workers, the public, and the environment. The EH Other Defense Activities are concentrated into the following activities within one decision unit: Corporate Safety Assurance, Health Studies, the Radiation Effects Research Foundation (RERF) support, Employees Compensation, including Worker Advocacy, and a Program Direction decision unit and includes full funding of pension and retirement costs for future retirees.

Corporate Safety Assurance (CSA) formerly the Office of Environment, Safety and Health Oversight, serves as a corporate asset to the Department and its stakeholders in assessing, facilitating, achieving, and assuring excellence and continuous improvement in safety management and performance in the conduct of its missions and activities. Activities include field assessment in areas such as nuclear safety, worker safety and health, environmental protection, and nuclear safety analysis, assuring the effective integration of safety into major DOE projects and nuclear materials management, analysis of operational experience and dissemination of lessons learned, and management and implementation of the Department's accident investigation program.

Health Studies activities include Occupational Medicine (corporate occupational medicine policy and former worker medical surveillance); Epidemiologic Studies (analysis and communication of worker injury and illness information); 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 and Spain).

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.

Employees Compensation activities support the compensation of current and former DOE workers with work-related illness resulting from their employment at DOE nuclear weapons sites. Assisting workers to file for benefits which they are eligible to receive under the Energy Employees Occupational Illness Compensation Program Act of 2000 involves outreach efforts and close working relationships with other Federal agencies designated to administer the program. The Office of Worker Advocacy, the Department's focal point for helping workers receive compensation benefits, will assist sick workers in understanding their rights under the program, gathering records needed to file claims, reviewing claims through physicians panels filed at the state level, and filing compensation claims, as appropriate.

Program Strategic Performance Goal

EQ3-1: Reduce the number of reportable deaths, injuries and illnesses and environmental releases from environment cleanup and other operational activities such that DOE organization activities remain below their averages established by DOE's last five years of data for five measures: Total Recordable Case Rate, the Occupational Safety Cost Index, the Hypothetical Radiation Dose to the Public, the average measurable dose to DOE workers, and the Reportable Occurrences of Releases to the Environment.

Performance Indicators:

- **Total Recordable Case Rate**: Recordable Case Rate measures work-related deaths, as well as injury or illness that results in loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment beyond first aid.
- **Occupational Safety Cost Index**: Occupational Safety Cost Index is a measure of the direct and indirect costs based on the Cost Index formula, due to safety-related injuries/illnesses.
- **Hypothetical Radiation Dose to the Public**: Hypothetical radiation dose to public is an estimate of the collective radiation dose to the public within 50 miles of DOE facilities due to airborne releases of radionuclides.
- **Worker Radiation Dose**: Worker radiation dose is calculated by dividing the collective total effective dose equivalent (TEDE) by the number of individuals with measurable dose.
- **Reportable Occurrences of Releases to the Environment**: Reportable occurrence of releases to the environment include releases of radionuclides, hazardous substances, or regulated pollutants that must be reported to Federal, State, or local agencies.

Annual Performance Results and Targets

FY 2001 Results	FY 2002 Results	**FY 2003 Targets**
• *Total Recordable Case Rate; Occupational Safety Cost Index; Hypothetical Radiation Dose to the Public; Worker Radiation Dose; and Reportable Occurrences of Releases to the Environment.* Met Goal	• *Total Recordable Case Rate; Occupational Safety Cost Index; Hypothetical Radiation Dose to the Public; Worker Radiation Dose; and Reportable Occurrences of Releases to the Environment.* (EQ3-1)	• *Total Recordable Case Rate; Occupational Safety Cost Index; Hypothetical Radiation Dose to the Public; Worker Radiation Dose; and Reportable Occurrences of Releases to the Environment.* (EQ3-1)

Program Strategic Performance Goal

EQ3-2: Identify health concerns and priorities as related to environmental cleanup and other operational activities through assessing injuries and illnesses in at least 70,000 current workers across 12 DOE sites and providing medical screening for at least 4,000 former workers exposed to beryllium and other hazards.

Performance Indicators:

- Provide medical screening to a minimum of 4,000 DOE workers formerly exposed to beryllium, radiation, or other hazards during their employment at DOE facilities.
- Assess injuries and illnesses in at least 70,000 workers across 12 DOE sites.

Annual Performance Results and Targets

FY 2001 Results	FY 2002 Results	FY 2003 Targets
• *Make biennial presentations of the results of epidemiologic surveillance analyses to workers and management at participating DOE facilities; and expand public access to the Office of Epidemiologic Studies through improved web linkages.* (CM1-1) Met Goal	• *Publish an additional 10 interim or final international health scientific and technical reports from the Radiation Effects Research Foundation, Marshall Islands, and Russians to increase our information defining the relationship between ionizing radiation dose and its effect on human health.* (EQ3-2)	• *Provide medical screening to a minimum of 4,000 DOE workers formerly exposed to beryllium, radiation, or other hazards during their employment at DOE facilities. Assess injuries and illnesses in at least 70,000 workers across 12 DOE sites.* (EQ3-2)

Specific Goals

In addition to the Program Strategic Performance Goals, the following specific program goals are also supported within this budget request.

Provide analysis to assist in targeting efficient activities and develop and disseminate lessons-learned to improve DOE-wide environment, safety, and health performance.

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 that initiatives relative to environment, safety, and health throughout the complex are analyzed and disseminated as appropriate.

Ensure increased contractor accountability for safety through implementation of the Price-Anderson Amendments Act of 1988.

Promote high quality workplace medical services to DOE and contractor employees.

Use epidemiologic analysis, medical surveillance of former workers 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 by studying workers and populations with unique exposure to radiation as a result of accidents or environmental contamination in the former Soviet Union and Spain.

Continue United States participation in support of the Radiation Effects Research Foundation.

Provide information to workers who may be eligible for employee compensation.

Manage a physician's panel review process for workers' compensation.

Develop close working relationships with State Bureaus of Workers' Compensation.

Ensure prompt and expeditious processing of meritorious workers' compensation claims.

Access and assemble exposure, personnel, job history and medical records necessary to process employee compensation claims.

Provide an electronic format that consolidates worker records for the Department of Energy.

Provide support to the State of Nevada to maintain and update a central cancer registry to determine whether activities at DOE's Nevada Test Site have had an effect on workers.

Specific Program Performance Indicators/Measures

In addition to the Program Strategic Performance Indicator, the following specific program performance indicators are also supported within this budget request.

With the broad objective of improving communication of the health effects associated with nuclear weapons production, testing, and use within past, current, and future DOE activities, the following actions will be undertaken:

Annual presentations of the results of epidemiologic surveillance analyses will be made to workers and management at participating DOE facilities.

Public access to DOE health information will be increased through electronic publishing on the Internet. All epidemiologic surveillance reports will be posted to a publicly accessible home page within 45 days of release, and abstracts of all reports and publications completed under our Memorandum of Understanding with the Department of Health and Human Services will be posted within 45 days of receipt.

A beryllium registry was established in March 2001 and is updated with input from DOE sites.

Public access to the United States Transuranium/Uranium Registries program's reports and information will be expanded by linkage of the Registries' Internet home page to the Office of Environment, Safety and Health home page.

Identification of at-risk worker populations and evaluation of 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.

Satisfaction of participants in former workers' pilot projects that issues surrounding their potential for occupationally-related disease are being addressed.

Reduction in the number of outstanding actions and commitments for resolving environmental, health, and safety issues identified by the Defense Nuclear Facilities Safety Board.

Increased stakeholder satisfaction with access to information on DOE public and occupational health initiatives.

Through studies of DOE community and worker populations, increased information defining the relationship between exposures resulting from DOE facility operations and their effects on human health.

Publishing of ten interim or final international health scientific and technical reports from the Radiation Effects Research Foundation, Marshall Islands, and Russian Studies to increase our information defining the relationship between ionizing radiation dose and its effect on human health.

Significant Accomplishments and Program Shifts

The Department has consolidated the management of Public Health Activities 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. Additional funding for Public Health Activities was provided in the Defense Environmental Restoration and Waste Management appropriation in FY 1999 and FY 2000, but was managed by EH. In FY 2001 and FY 2002, the EH Other Defense Activities appropriation is the sole source of funding. The focused investigation in the use of recycled uranium at the Gaseous Diffusion Plants has been completed. EH will continue to monitor safety and health activities and progress through its regular program of evaluations and follow-up reviews. The Energy Employees Occupational Illness Compensation Program Act of 2000 implementation activities have been focused within EH. Significant Accomplishments and program shifts are defined within the respective descriptions that follow.

Corporate Safety Assurance

Background: In 2001, The Secretary of Energy restructured the Department to provide a central independent oversight organization to oversee ES&H and safeguards and security within both DOE and NNSA. This office known as Independent Oversight and Performance Assurance (OA) reports to the Deputy Secretary of Energy and is not part of the Office of Environment, Safety and Health (EH).

The former EH Office of Oversight (EH-2) has transitioned to the Office of Corporate Safety Assurance (CSA). CSA will serve as a corporate safety organization for the Department including line management and the Department's stakeholders. This crosscutting safety function is similar to the corporate safety organizations and the Institute of Nuclear Power Operations (INPO) utilized to successfully improve safety performance as well as plant availability and efficiency within the commercial industry.

CSA Program: In its new role as a crosscutting corporate safety organization, this office is expected to have the capability to make a significant contribution to the effective integration and application of safety, including environment, safety and health, into all DOE and NNSA missions and activities. The successful integration of safety is vital to the protection of our workers and communities, as well as to the success of our diverse missions and activities, and to the avoidance of significant and costly impact that safety violations, accidents, and operational standowns can have on the mission and activities.

In accomplishing its corporate safety mission in fiscal year (FY) 2002 and 2003, CSA will focus it's resources and activities in responding to and supporting the following:

- The Secretary's mission and priorities including the protection of our workers and the communities surrounding our sites, our national security, our energy infrastructure, research and development, stockpile stewardship, and the accelerated cleanup of excess sites and the environment.
- Facilitation and support of safety management strategy and improvement initiatives resulting from a special study commissioned by the Under Secretary for Energy, Science and Environment and a DOE/NNSA Executive Safety Conference.
- Nuclear Safety including the control of nuclear materials, criticality safety, and the Department's improvement initiatives in response to Defense Nuclear Facilities Safety Board (DNFSB) related to quality assurance and safety systems.
- Protection of our workers, including subcontractors, from the unique radiological, chemical, and industrial hazards associated with our rapidly increasing environmental cleanup mission including activities such as the recovery, characterization, stabilization, and processing of hazardous materials; the decontamination and decommissioning of facilities and equipment; and the storage, packaging, and transportation of hazardous materials.
- The needs and requests of DOE and NNSA line management related to the effective and implementation of integrated safety management (ISM), key ES&H programs such as criticality safety, radiation protection, industrial safety, and fire protection, nuclear facilities authorization bases and readiness reviews, and the investigation and resolution of safety performance problems and events.

To accomplish its corporate safety mission, CSA will continue to employ proven techniques and activities such as field assessment, safety analyses, event and accident investigations special reviews, and performance monitoring and analysis of operating experience and dissemination of lessons learned. This

office's collective and crosscutting knowledge and understanding of the Department's diverse missions, hazards, problems, and successful programs and initiatives, as well as benchmarking against commercial nuclear and private industries, will also enable CSA to serve as a catalyst in achieving continuous improvement in safety management and performance. It will also allow CSA to serve the Department and line management in taking a more effective and efficient collaborative approach to resolving long-standing safety performance and generic safety issues in areas such as procedure quality and use, quality assurance, electrical safety, and subcontractor safety.

Key Program Projects and Activities FY 2002/2003:

Field Assessments: CSA will conduct field assessments in response to DOE senior management direction, line management requests, or in response to declining safety performance or safety and technical issues. As an organization separate and apart from the line organization and without bias, CSA can contribute to continuous improvement and assurance of the effectiveness of programs and processes important to safety management and performances. Examples include criticality safety, radiation protection, chemical safety, fire protection, configuration management, quality assurance, environmental protection, industrial safety, and nuclear authorization bases and unreviewed safety questions (USQ) processes.

As a corporate safety organization, CSA can also utilize its collective experience and benchmarking to support line management in the identification (not implementation) of solutions and opportunities for improvement. The office can also utilize its assessment experience, techniques, and performance standards to strengthen line management's self assessment capabilities through joint assessments, menitoring, and training.

Safety Analysis: CSA will continue to conduct independent reviews of selected authorization bases (safety analysis reports, basis for interim operations, and justifications for continued operation) to assure that all DOE hazardous activities are conducted within the approved safety envelope and within an adequate safety margin. This is particularly true for new nuclear facilities and for facilities undergoing life cycle, mission, and hazard changes. The office will also review positive unreviewed safety question (USQs) and USQ processes, and support line management in the effective implementation of the new DOE authorization bases Rule.

Event and Accident Investigations: CSA is charged with managing the Department's accident investigation program. This program, which has been recognized as one of the most successful in the industry, includes the chartering and conduct of Type A investigations and dissemination of lessons learned from the most serious DOE accidents and events. The office also monitors and contributes to the improvement of line management Type B (lesser events) and processes. CSA also conducts accident investigation team leader and member training on request at field locations throughout the DOE complex.

Integration of Environment, Safety and Health Into Major DOE Projects: The effective and efficient integration of safety into all phases of DOE projects is essential to project success and avoiding costly omissions, deficiencies, and surprises in later project stages. CSA works collaboratively and cooperatively with line and project management to assure this effective integration through design, safety analysis, and ESSAB reviews and site/project visits during key activities associated with construction startup testing, operation, or decommissioning.

Special Reviews and Investigations: CSA must be prepared to conduct reactive, for-cause special reviews or investigations in response to emerging safety issues or adverse trends, DOE senior management concerns and direction, or DOE line management requests. These special reviews and investigations

benefit the Department by identifying systemic and programmatic safety management improvements. Recent examples include a review of DOE criticality safety controls following Japans criticality accident and fatalities; a complex-wide fire protection review following the DOE wildfires in 2000; and a special investigation of current and former worker health and safety concerns at the gaseous diffusion plants.

Analysis of Operating Experience and Dissemination of Lessons Learned: The effective analysis of operating experience and utilization of the lessons learned is critical to continuous improvement and excellence in safety management and preventing recurrence of accidents, events, and near-misses. CSA serves as a central Headquarters organization in effectively monitoring and analyzing, safety performance information and operational occurrences and identifying adverse performance trends and safety issues to line management. The office also serves to disseminate the lessons learned from operational experience through summary reports, safety bulletins, lessons learned videos, workshops, and the daily roll up of occurrences to the Program Offices.

Corporate Safety Assurance: (FY01: $2,401; FY02: $3,208; FY03: $3,000)

Enforcement

The Price-Anderson Amendments Act (PAAA) of 1988 requires DOE to establish an internal self-regulatory process for ensuring nuclear safety. This process is carried out by the Office of Price-Anderson Enforcement (EH-Enforcement) and encourages DOE contractors to proactively identify and correct nuclear safety deficiencies. The staffing level of less than 10 Federal employees has remained constant since 1996. The innovative approach to enforcement focuses on significant safety issues while providing maximum incentives for DOE's contractors to identify and correct safety issues on their own initiative rather than use a labor intensive regulatory inspection program. The functions of EH-Enforcement have increased significantly over the past two fiscal years. Specifically, EH-Enforcement added PAAA Program Reviews of contractor programs to: (1) recommend improvements, (2) provide feedback on contractor performance, and (3) address complex-wide safety issues. EH-Enforcement also began to issue Enforcement Guidance Supplements to provide more precise guidance to DOE and contractors on how to best comply with DOE's nuclear safety regulations to ensure consistency across the complex. Moreover, as the Enforcement Program matured, EH-Enforcement shifted its emphasis to more complex programmatic issues that are larger in scope than the single issues that DOE addressed when the process was new. For example, in FY 2000, EH-Enforcement began focusing on significant complex-wide deficiencies in the procurement of nuclear safety related components and services, Authorization Basis and criticality safety. The work of EH-Enforcement in these and other programmatic areas led to more effective front-end contractor controls and less reliance on dealing with problems after the fact. In FY 2000, DOE issued 11 Notices of Violation in which the actual or potential safety consequences were sufficiently serious to warrant actions and entered into three Consent Orders to resolve significant safety issues. These significant safety issues represent a continuing challenge for DOE, and EH-Enforcement anticipates it will conduct 14 enforcement investigations during FY 2003. Federal employees in EH-Enforcement will conduct these investigations with assistance from contractual technical experts. This assistance is necessary to leverage and effectively use EH-Enforcement's limited personnel resources, and it allows EH-Enforcement to carry out its responsibilities and perform any extraordinary work associated with the new 10 CFR 830.200 Rule, including resolving issues associated with the implementation of any new rule. EH-Enforcement will continue to conduct PAAA Program Reviews to support DOE and Congressional interest in achieving the objectives of the Price-Anderson Amendments Act. (FY01: $973; FY02: $973; FY03: $700)

Defense Nuclear Facilities Safety Board Liaison

Coordinate the Board's recommendation process through line organizations by developing responsive implementation plans, resolving technical and management issues, completing commitments, and ultimately closing recommendations. At present, there are eleven active Board recommendations. Support line management in implementing essential cross-organizational programs in response to Board recommendations and reporting requirements, including Integrated Safety Management, Corrective Actions Management, Quality Assurance, and Criticality Safety. 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 the Department staff and the Board staff. Coordinate over 30 program office, field, and contractor points of contact. Conduct periodic interface workshops and training. Coordinate responses to Board reports, inquiries, and statutory reporting requirements. Manage the Department's Safety Issues Management System (SIMS) for Board-related issues, commitments, and actions. This system currently tracks over 500 active Department commitments and actions related to Board recommendations and other correspondence. Maintain the Department's central repository of official Board communications and make this information available to the public and to Department and contractor personnel complex-wide. Annually, 250-350 pieces of Board/Department correspondence are received and made available on the Internet. Over 3,000 documents are currently available on the web site in multiple file formats for customer convenience. Documents are posted in 1 to 3 business days to facilitate action. Manage DOE Facility Representatives Program and continue the training and retention for this program. Manage DOE Integrated Safety Management Program and continue the field out placement program. (FY01: $599; FY02: $599; FY03: $532)

Information Technology Support

The funds were used for information technology to support the Corporate Safety Assurance Program. The reduction in this Program in FY 03 eliminated the need for this funding. (FY01: $0; FY02: $589; FY03: $0)

Health Studies

Occupational Medicine

Medical Surveillance of Former Workers

This program provides medical monitoring for former DOE employees at risk for occupational disease. (FY01: $14,681; FY02: $19,777; FY 03: $13,950)

Continue to provide expanded medical monitoring for former DOE employees at risk for chronic beryllium disease (CBD). Over 55,000 former workers have been contacted and offered an opportunity to participate in the beryllium worker medical surveillance program. In FY 2002, more than 2,000 participants were provided medical examinations, bringing the total number of workers who have participated in the program to approximately 20,000. More than 160 cases of CBD have been found. A small percentage of program funds were also used to initiate efforts to: a) develop a registry of DOE workers exposed to beryllium through routine collection and analysis of medical information; and b) support the development of a central DOE beryllium institutional review board.

For DOE workers at risk for other occupational diseases due to past work-related exposures including beryllium, continue implementation of the DOE Former Workers Program in response to 42 USC Section 7274, "Program to monitor Department of Energy workers exposed to hazardous and radioactive substances," by conducting the medical screening phase of the 12 ongoing projects at DOE sites. Complete the needs assessment for medical screening at the Pantex Plant in Amarillo, Texas. In FY 2002, approximately 8,000 participants will be provided medical examinations, bringing the total number of workers who have participated in the program to more than 20,000. Exam results to date have provided evidence of pulmonary disease (including asbestosis and silicosis), beryllium sensitization, skin disease, hearing loss, and other possible work-related health conditions in those screened.

Continue medical monitoring of former radiation workers at the Rocky Flats Environmental Technology Site with lifetime exposure levels of 20 rem or more.

Medical Surveillance Information System

Successfully demonstrate transmission of de-identified medical data from the Y-12 and the East Tennessee Technology Park sites to DOE-HQ and demonstrate the utilization of this data for monitoring the health of site contractor employees. Complete studies of the expansion of the system to additional DOE sites. Provide routine reports of the results of the pilot linkups of the Y-12 and the Tennessee Technology Park sites to the Medical Surveillance Information System to DOE occupational medicine managers and staff (and other Headquarters and site health professionals). (FY01: $350; FY02: $100; FY03: $0)

Line Management Support

Continue providing policy, standards, guidance and corporate services to support Operations Office efforts to efficiently deliver quality occupational medical services. As DOE's corporate source of competence and experience in occupational medicine, serve as a focal point for communication with the Department on occupational health risk and protection data. Facilitate the sharing of information between and among research and operating organizations. Issue a revised occupational medicine chapter of DOE Order 440.1A "Worker Protection Management for DOE Federal and Contractor Employees." Complete Subpart B, Medical Standards, 10 Code of Federal Regulations (CFR) 712, "Human Reliability Program." Complete medical standards for the revised 10 CFR 1046, "Physical Protection of Security Interests." Issue a DOE Order on "Workplace Violence" and continue to survey DOE sites on the degree of workplace violence. Issue a directory of contractor Employee Assistance Programs (EAP) of DOE contractor facilities and initiate a DOE technical standards project to develop EAP standards. (FY01: $400; FY02: $400; FY03: $400)

Radiation Emergency Accident Center/Training Site (REAC/TS)

Continue 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. Continue support of REAC/TS maintenance of three Food and Drug Administration investigations of drug applications for DOE to be used for the treatment of internal deposition of radiological substances. (FY01: $300; FY02: $300; FY03: $300)

Information Technology

The Office of Health Studies information technology support provides significant systems and databases of worker and public health related issues. These systems and databases support the primary mission of identifying the impacts of current and former activities of the Department on the health of its workers and the public. In addition, the Office of Health Studies web site is a major source of detailed information concerning these issues for the public and former and current workers. During FY 2002, system upgrades and infrastructure investments required by the Energy Employees Occupational Illness Compensation Program Act of 2000 and other program initiatives were accomplished. Previously, these activities were funded in DOE-Wide ES&H Programs. (FY01: $0; FY02: $3,500; FY03: $1,950)

Public Health Activities

Develop a 5-year plan for public health activities at DOE sites for FY 2002-2006. This includes a collaborative effort under the Memorandum of Understanding with the U.S. Department of Health and Human Services that includes community health studies and activities, environmental dose reconstruction projects, single and multi-site occupational cancer mortality and incidence studies of workers, and community outreach and education efforts. (FY01: $22,342; FY02: $19,342; FY03: $17,160)

Complete three worker studies, two public health consultations, a public health assessment, and one community study as specified in the previous 5-year plan.

Utilize stakeholder input at public meetings and in other forums in the planning for and design of all public health activities. Develop a communication plan among the agencies as specified in the MOU.

Epidemiologic Studies

Continue epidemiologic surveillance of DOE workers: continue expansion of program to add one to two additional sites to the 70,000 current workers now under epidemiologic surveillance. Continue collection and analysis of radiologic dosimetry data for all monitored workers at epidemiologic surveillance sites to enhance assessment of worker health. Continue health assessments of workers in medical monitoring programs at participating sites; integrate data from the pilot Medical Surveillance Information System in epidemiologic analyses for Oak Ridge as these data become available. Make additional worker health and dosimetry information, and data from completed epidemiologic and historical dose reconstruction studies available through the Comprehensive Epidemiologic Data Resource. Continue to publish findings in annual epidemiologic surveillance reports for each site; provide briefings with supporting written materials on completed studies to stakeholders. Identify emerging health issues requiring evaluation; continue development of a beryllium exposure registry for workers and complete data entry for registrants from at least ten sites; continue communications activities with affected work forces and surrounding communities with regular presentations and briefings. Conduct investigations of reported illnesses and injuries among workers as needed. (FY01: $2,300; FY02: $2,300; FY03: $2,300)

Continue to study the biokinetics, deposition and dosimetry of uranium and the transuranic elements in humans to provide data fundamental to the verification of occupational radiation dose assessments and protection standards. The basis for this work is the analysis of tissues and bone samples, which

are post mortemly donated by volunteer registrants. Advanced registrant ages means increased workload to analyze additional, important cases. Results are presented at conferences and in peer-reviewed journals. Databases and archived tissues are available for researchers as well as collaborative projects that examine the applicability of model parameters to particular DOE sites.(FY01: $1,000: FY02: $1,000; FY03 $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 provide 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. (FY01: $6,300; FY02: $6,300; FY03: $6,300)

Continue analysis of data related to the environmental mitigation and ecological and agricultural assessment studies at Bikini and make findings available for local community use.

Perform radiological monitoring support after potassium fertilizer application conducted pursuant to the MOU with Rongelap to provide data needed to make informed decisions about Rongelap resettlement.

Perform calibration and quality assurance testing of the whole body counter on Enewetak Island and provide technical assistance to help Enewetak conduct whole body counting and plutonium urinalysis personnel monitoring.

Augment public health initiatives at the two primary care clinics at Kwajalein and Majuro and continue to provide year-round health care capability for the mandated Rongelap and Utrik patients.

Prepare an annual report to Congress on the scope of work and cost of the DOE special medical care program for the DOE patients from Rongelap and Utrik atolls.

European Programs

JCCCNRS (Chernobyl)

Continue, in collaboration with the National Cancer Institute, long-term leukemia and thyroid cancer studies of populations affected by the Chernobyl accident. (FY01: $1,500; FY02: $1,500; FY03: $1,500)

JCCRER (Russian)

Continue U.S.-Russian collaborative efforts involving the conduct of full-scale cohort studies to investigate the health effects on workers and local populations associated with radiation exposures from the operations of the weapons production facilities in Russia. (FY01: $3,000; FY02: $3,000; FY03: $3,000)

Complete first long-term phase of worker dosimetry project and initiate phase II; and

Validate doses and uncertainties in community population dosimetry project – Initiate feasibility study for enlarging the community cohort to include the East Urals Radioactive Trace Cohort and the Ozersk exposed cohorts; and

Initiate feasibility studies of plutonium exposures in workers; in-depth studies of women workers; and studies of effects of combined internal – external exposures.

Project Indalo

Continue U.S. collaboration with Spain in the Project Indalo program of medical surveillance environmental monitoring for the effects of plutonium contamination. As recommended by the final report of the Palomares Scientific Review Committee (SRC), assist the Spanish Government during the conduct of a quantitative health risk assessment to help characterize the risk of plutonium exposure to humans. Work with the Spanish Government to jointly implement the recommendations of the SRC. (FY01: $300; FY02: $300; FY03: $300)

Radiation Effects Research Foundation

Continue analysis of the risks of exposure to radiation by updating epidemiologic data on incidence of cancer and non-cancer diseases in A-bomb survivors. Continue measurements and analysis of data related to A-bomb dosimetry. (FY01: $13,354; FY02: $13,500; FY03: $13,500)

Complete reassessment of A-bomb dosimetry.

Finalize new funding arrangement with the Japanese Ministry of Health, Labor and Welfare.

Negotiate new cooperative agreement with the National Academy of Sciences for support of RERF program.

Gaseous Diffusion Plants

In response to a number of environment, safety, and health (ES&H) allegations and concerns, the Secretary of Energy initiated an investigation at the three DOE Gaseous Diffusion Plants located in Paducah, Kentucky, Portsmouth, Ohio, and Oak Ridge, Tennessee. The ES&H concerns centered on areas such as improper onsite and offsite disposal of hazardous and radioactive materials, release of contamination into site streams and drainage ditches, inadequate posting and control of contaminated areas, exposure of workers to uranium and transuranic elements, and ineffective communication of hazards to workers. Consequently, the EH initiated an investigation of the current and historical operations at the Paducah Plant, the Portsmouth Plant, and the East Tennessee Technology Park (formally the K-25 Gaseous Diffusion Plant). The investigation involved hundreds of interviews with current and former workers, review of thousands of historical records and documents, first-hand

work place examinations, and environmental sampling and analyses. The result of this monumental effort verified that the gaseous diffusion plants operated in a climate of secrecy, with a strong sense of urgency and national need, and without external regulation of worker safety and health or regard for the environment. The investigation revealed that workers at these facilities were exposed to very hazardous chemicals and in some locations received significant radiation doses. In accordance with Departmental policy, Corrective Action Plans have been compiled to address deficiencies and issues identified for current operations at each of the gaseous diffusion plants. Full follow-up reviews will be conducted periodically at each of the three plants to assess the effectiveness of the corrective action in addressing the systemic weaknesses identified at the three sites (minimum of 12 follow-up reviews per annum).

Due to concerns about the historical worker health and safety programs at the Paducah Gaseous Diffusion Plant, the Department of Energy conducted an evaluation of the historical potentials for worker radiation exposure. The final report was published in February 2001.

The Medical Surveillance Project will continue the existing medical screening program for former workers at the three gaseous diffusion plants and expand the program to provide medical surveillance of current workers. Medical surveillance was initiated in FY 2000 and will continue in FY 2001. The screening and education program is gradually accelerating the pace of screening from 1200 to 4800 workers per year in FY 2001. In FY 2000, the project also initiated screening for early detection of lung cancer using an advanced scanning technology. The program will continue to offer high-risk former and current workers with medical screening through FY 2001. (FY01: $8,723; FY02: $0; FY03: $0)

The Epidemiology Study by the Universities of Louisville and Kentucky on the Paducah Gaseous Diffusion Plant workforce begins with a feasibility study. This study is managed by the National Institute for Occupational Safety and Health. (FY01: $1,750; FY02: $0; FY03: $0)

In order to predict the behavior of contaminated ground water at and surrounding the Paducah Gaseous Diffusion Plant, the Department has entered into a partnership with the U.S. Army Corps of Engineers and the Environmental Protection Agency to demonstrate the Groundwater Modeling System (GMS). The GMS is a state-of-the-art computational system for subsurface visualization, conceptualization, modeling and analysis in support of a determination of the distribution, movement and clean-up of numerous contaminates. (FY01: $1,500; FY02:$0; FY03: $0)

Employee Compensation

EH will assist claims filing at State Compensation Programs, to include, but not be limited to, gathering the information for a claim, assembling it, reviewing it, and forwarding it to a State Compensation Program. (FY01: $16,963; FY02: $15,000; FY03: $16,000)

EH will respond to letters within 14 days and telephone inquiries within 7 days.

All appropriate compensation claims will be reviewed by the physician’s panels.

EH will establish and manage an Advisory Committee consisting of diverse stakeholders (workers, occupational physicians, and union representatives) to advise the office on its policies and procedures;

EH will develop and implement a program to educate and reach out to workers and their families, unions and others about the benefits and assistance available to sick workers and their survivors;

EH will work with State benefits administrators to review and track compensation claims for occupational illnesses in the Department; operate a toll-free hotline for workers who are interested in filing workers' compensation claims with their state programs or need assistance with previously filed claims;

Expedite claims that can be processed without further review and help workers get any additional information needed;

Provide worker advocates, who will serve as liaison with DOE workers, State workers' compensation officials, benefits administrators, occupational physicians, union representatives, and workers' compensation experts, and others.

Program Direction

Salaries and Benefits

Salaries and Benefits for FY 2003 provide funding of $16,057 for 131 Federal full-time-equivalents (FTEs) working on EH Defense activities. Overall, salaries and benefits are in line with the full-time-equivalents requested and include the Economic Assumption as provided by the Office of Management and Budget (OMB). This also includes a recalculation of the funding required to support the skills mix of a smaller workforce. In addition, funding is provided for workers' compensation payment to the Department of Labor, benefits associated with permanent change of station, transit subsidies and incentive awards. (FY01: $18,267; FY02: $17,318; FY03: $16,057)

Travel

Travel requirements are consistent with support for the EH Federal staff and include the Economic Assumption as provided by OMB. Travel includes all costs of transportation, subsistence, and incidental travel expenses in accordance with Federal travel regulations. (FY01: $967; FY02: $1,232; FY03: $967)

Other Related Expenses

This includes training and tuition costs for EH Federal employees and full funding of pension and annuitant health care benefits. (FY01: $1,200; FY02: $1,216; FY03: $994)

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Other Defense Activities					
Operating Expenses					
Corporate Safety Assurance [a]	3,973	9,369	-4,000	5,369	4,232
Health Studies	52,473	57,819	0	57,819	48,160
RERF	13,354	13,500	0	13,500	13,500
Gaseous Diffusion Plants	11,973	0	0	0	0
Employee Compensation	16,963	15,000	0	15,000	16,000
Program Direction [b c]	20,434	23,066	-3,300	19,766	18,018
Subtotal, Other Defense Activities	119,170	118,754	-7,300	110,388	99,910
Use of prior year balances	0	-10,000	-1,231 [d]	-11,231	0
Total, Other Defense Activities	119,170	108,754	-8,531	100,223	99,910
Total Excluding Full Funding for Federal Requirements, EH Other Defense Activities	118,095	107,688	-8,531	99,157	99,041

Public Law Authorization:
Public Law 83-703, "Atomic Energy Act of 1954", as amended
Public Law 100-408, "Price-Anderson Amendments Act of 1988"
Public Law 106-398 "Energy Employees Occupational Illness Compensation Program Act of 2000"
Public Law 103-337 "National Defense Authorization Act of 1995."
Public Law 99-239, "Compact of Free Association Act of 1985"
Public Law 95-134 - Marshall Islands (Related to Rongelap and Utirik Atolls)
Public Law 96-205, "Trust Territory of the Pacific Islands"
Public Law 95-91, "Department of Energy Organization Act"
Public Law 103-62, "Government Performance Results Act of 1993"
42 U.S.C. Section 7274 "Program to Monitor DOE Workers Exposed to Hazardous and Radioactive Substances"

[a]EH funding amounts for FY 2001 and the FY 2002 Request have been made comparable with the amounts deleted from the program in FY 2003 to reflect the Secretary's Initiative to consolidate Oversight activities in the Office of Independent Oversight and Performance Assurance.

[b]Excludes funding for 24 FTE's to support the Secretary's direction to consolidate the agency's Oversight responsibilities in the Office of Independent Oversight and Performance Assurance.

[c]"The FY 2001 and FY 2002 columns of the FY 2003 Congressional Request include funding in the amount of $1,075,000 and $1,066,000, respectively, for the Governments share of increased costs associated with pension and annuitant health care benefits. These funds are comparable to FY 2003 funding of $869,000. (Note: The data is presented on a comparable basis as if the legislation had been enacted and implemented in FY 2001.)"

[d]$1,231,000 assigned as part of the Other Defense Activities $10,000,000 additional reduction in prior year balances.

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque Operations Office					
Los Alamos National Laboratory	111	111	111	0	0.0%
Sandia National Laboratories	295	295	295	0	0.0%
Albuquerque Operations Office	388	388	388	0	0.0%
Total, Albuquerque Operations Office	794	794	794	0	0.0%
Chicago Operations Office					
Brookhaven National Laboratory	165	165	165	0	0.0%
Chicago Operations Office	698	698	698	0	0.0%
Total, Chicago Operations Office	863	863	863	0	0.0%
Idaho Operations Office					
Idaho National Engineering & Environmental Laboratory	250	250	250	0	0.0%
Idaho Operations Office	100	100	100	0	0.0%
Total, Idaho Operations Office	350	350	350	0	0.0%
Nevada Operations Office	7,140	7,140	7,140	0	0.0%
Ohio Field Office	333	333	333	0	0.0%
Rocky Flats Field Office	300	300	300	0	0.0%
Oakland Operations Office					
Lawrence Berkeley Laboratory	280	280	280	0	0.0%
Lawrence Livermore National Laboratory	2,938	2,938	2,938	0	0.0%
Oakland Operations Office	29,124	29,124	29,124	0	0.0%
Total, Oakland Operations Office	32,342	32,342	32,342	0	0.0%
Oak Ridge Operations Office					
Oak Ridge National Laboratory	732	732	732	0	0.0%
Oak Ridge Operations Office	9,912	9,912	9,912	0	0.0%
Total, Oak Ridge Operations Office	10,644	10,644	10,664	0	0.0%
Richland Operations Office					
Pacific Northwest National Laboratory	669	669	669	0	0.0%
Richland Operations Office	1,298	1,298	1,298	0	0.0%
Total, Richland Operations Office	1,967	1,967	1,967	0	0.0%
Savannah River Operations Office	435	435	435	0	0.0%
All Other Sites					
Washington Headquarters	64,002	56,286	44,168	-11,347	-20.5%
Use of Prior Year Balances	0	-11,231	0	11,231	+100.0%
Total, Defense	119,170	100,223	99,910	-313	-0.3%

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.

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. Sandia provides specialized technical expertise in the evaluation of long-term dry storage of K-Basin Spent Nuclear Fuel, taking into account the associated physical and chemical changes. Sandia also provides specialized technical expertise in the development of software for radiological hazard analyses at DOE facilities.

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 in New York.

Brookhaven National Laboratory

Brookhaven National Laboratory (BNL) 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 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.

Idaho Operations Office

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

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, environment, safety, and health management and programs, including the Marshall Islands program, as well as supporting other DOE programs. Nevada participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site. Nevada also manages DOE support to the Nevada State Cancer Registry and to the University of Nevada-Las Vegas' work on the DOE Electronic Records project.

Ohio Field Office

The Department of Energy's Ohio Field Office includes five sites, four in Ohio and one in New York. Its primary mission includes overseeing the five project offices responsible for environmental restoration, waste management, nuclear material and facility stabilization, and technology development. It provides support for the activities of the Energy Employees Occupational Illness Compensation Program.

Rocky Flats Field Office

Rocky Flats is a former nuclear weapons facility located approximately 16 miles northwest of Denver, Colorado. Rocky Flats no longer has a production mission. Its mission now is to clean up its nuclear and chemical contamination while decommissioning the site. It provides support for the activities of the Energy Employees Occupational Illness Compensation Program.

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; 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), 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 and performs epidemiological site surveillance.

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 participates in the epidemiologic surveillance program through the collection and transmission of worker health, exposure, and demographic data at the site.

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.

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.

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 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 provides technical support for recurring safety management evaluations, as well as site profile development, accident investigations, and other special studies and reviews. PNNL also assists in tracking and trending corrective actions, 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.

Savannah River Operations Office

Savannah River Operations Office, Aiken, South Carolina, is responsible for serving 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. Savannah River Operations also provides technical support to site reviews of Criticality Safety Programs.

All Other Sites - Washington 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 skills 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 regulatory expertise to support the investigation of alleged violations of the Price-Anderson legislation that is not otherwise available within DOE.

Contractors also provide technical expertise in conducting activities at DOE facilities. These activities include inspections, safety management evaluations, special studies, site profiles, and analyses, utilizing specialized technical expertise to obtain an appropriate skills 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 Office of International Health Studies.

Under a Memorandum of Understanding, the Department of Labor and DOE support the implementation of the Energy Employees Occupational Illness Compensation Program Act of 2000.

Program Performance Summary

Corporate Safety Assurance

Mission Supporting Goals and Objectives

The mission of the EH Office of Corporate Safety Assurance is to be a crosscutting, corporate asset to the Department, line management, and DOE stakeholders in assuring and facilitating continuous improvement in the protection of our workers, the public, and the environment. This mission is accomplished through assessments; analyses; investigations; technical support; dissemination of lessons learned; Price-Anderson Amendments Act enforcement; and providing Departmental representation to the Defense Nuclear Facilities Safety Board (DNFSB).

This program conducts activities that are critical to the Department's ability to monitor the status of environment, safety and health across the complex; to proactively identify and resolve emerging safety issues and adverse trends; and to assure continuous improvement in the protection of workers, communities, and the environment from the hazards associated with changing DOE missions and activities. The program also serves our national security mission by assuring the effective integration of safety and success of mission programs including security of our energy infrastructure, research and development, stockpile stewardship, and accelerated cleanup of DOE's excess sites and environmental contamination.

Given its crosscutting role in supporting safety excellence, CSA receives intense scrutiny from DOE senior management, DOE and contractor line management, and DOE stakeholders. CSA must also interface effectively with other internal and external organizations in accomplishing this mission including Congress, the DNFSB, Office of Inspector General, Environmental Protection Agency, Nuclear Regulatory Commission, Institute of Nuclear Power Operations, Federal Emergency Management Agency, Occupational Safety and Health Administration, and state and local governments.

Within this environment, the capability and credibility of this office demands the employment of national-level, best-in-class, technical experts to implement its assessment, analysis, and investigation responsibilities. Attrition, prolonged hiring freezes, frequent reorganizations, and decreasing contractor support funding in recent years have created critical technical skill deficiencies within the office that significantly impact mission capabilities. While peak and very specific skill needs can be fulfilled with expert contractors, diminishing contract support dollars, cost and skill retention, and credibility with line management and stakeholders all favor filling critical skill needs with Federal employees. CSA's effective mission accomplishment critical skill needs include disciplines such as nuclear engineering, criticality safety, chemical process safety, weapons safety, packaging and transportation, systems and operations, and radiation protection.

Program Performance Summary (2001): Key office program accomplishments over the last 12 months include:

- A complex-wide fire protection review in response to the 2000 DOE wildfires and in support of the DOE fire safety commission.

- Follow-up reviews to investigation of health and safety concerns at the DOE gaseous diffusion plans and support of former worker compensation legislation.
- Integrated safety management evaluation at the Idaho and Oak Ridge National Laboratories, Hanford Tank Farm, and Princeton Fusion Test Reactor.
- Special diagnostic review of safety concerns and allegations at the Rocky Flats Site (DOE line management request).
- Special investigation of a tritium leak and environmental contamination from the High Flux Isotope Reactor at Oak Ridge National Laboratory.
- Criticality Safety Reviews at sites such as the Idaho National Engineering and Environmental Laboratory and the East Tennessee Technology Park and a criticality workshop in Albuquerque.
- Type A accident investigations of serious accidents at the Fermi-laboratory and Los Alamos National Laboratory.
- Conduct of five accident investigations and team leader courses in field locations/line management requests).
- Technical field assessments in areas such as construction safety, work planning and control, quality assurance, electrical safety, and decommissioning of facilities.
- Review of safety integration into major DOE projects including design and construction of the spallation neutron source at Oak Ridge, removal of degrading spent reactor fuel from the Hanford K-Basins, and decontamination and decommissioning of the Graphite Reactor at Brookhaven National Laboratory.
- The review of implementation plans and DOE ORRs to assure the safety startup or restart of nuclear facilities and contribute to improvements in the ORR process.
- The re-implementation of the biweekly operational experience report to assist line management in benefiting from operational experience and lessons learned.

2002 Program Goals, Objectives, and Activities

Contribute to strengthening nuclear safety across the complex including:

Upgrading quality assurance in response to DNFSB concerns

- Strengthening criticality safety through assessments, diagnostic reviews, training, and workshops
- Contributing to review and upgrading of vital safety systems in response to DNFSB. Recommendation 2000-2 and a degrading infrastructure.
- Monitoring the control and management of nuclear materials and packaging and transportation.
- Assuring safety and supporting analyses associated with the Yucca Mountain Waste Storage Project.
- Contribution to effective environmental management and protection through program assessments, monitoring and analysis, event investigations, and the development and implementation of a pilot

groundwater modeling program at the Paducah Gaseous Diffusion Plan in coordination with the Corps of Engineers.

- Facilitate and support initiatives and actions resulting from a special study commissioned by the Under Secretary for Energy, Science and Environment and the Executive Safety Conference designed to "Take ISM to the Next Level" including:
  - Achieve integrated planning and coordination of DOE independent and line oversight to reduce redundancy and burden on our contractors and increase value-added.
  - Develop an accreditation process for contractor self-assessment programs to incentivize improvement and decrease direct DOE oversight in accordance with DOE Policy 450.5.
  - Centralize the Headquarters operational experience program and revise the occurrence reporting system to link to ISM, eliminate the nuisance-reporting burden, and increase value to DOE and contractor line management.
  - Contribute to revising the DOE procurement and contracting approach to improve the tailoring and contracting approach to improve the tailoring and contribution to differing missions and safety management including attracting best-in-class contractors and subcontractors, eliminating redundant requirements, and incentivizing safety performance and accountability.
  - Develop and work with line management to implement a complex-wide color rating performance monitoring system to more effectively monitor safety and program performance, drive continuous improvement, and assist in prioritizing line management attention and resources.
- Continue to implement and strengthen other key CSA programs and activities including:
  - The review and disposition of ES&H concerns and allegations received by EH.
  - Field technical assessments and diagnostic reviews.
  - Authorization bases and unreviewed safety question reviews.
  - ORRs and process improvements.
  - Accident investigations and training
  - Monitoring of DOE dam safety in coordination with FEMA and FERC
  - Participation in the Interagency Nuclear Safety (INSRP) Program to assure the safety of nuclear materials utilized in space missions.
  - Implementing the EH nuclear safety exchange agreement with the United Kingdom including management and inspector exchanges, sharing operational experience, and sponsoring technical exchanges in areas such as weapons safety, decommissioning, and waste management.

Health Studies

Mission Supporting Goals and Objectives

The Health Studies program promotes the health and safety of DOE's workers and communities at and 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.

Occupational Medicine is the DOE corporate resource which 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 making use of a dedicated and focused information technology database. It also supports the medical screening of former DOE workers whose health may be at risk from exposure to hazards at DOE sites.

Public Health Activities support health studies, health education and promotion, and other activities at DOE sites. These activities are based on a unified strategy and are published annually as the "Agenda for Public Health Activities at U.S. Department of Energy Sites." 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 single Memorandum of Understanding (MOU). This program supports studies to assess whether the health of workers and residents in nearby communities has been impacted by DOE operations. Information from these activities is communicated to the DOE workforce, line management and community stakeholders.

Epidemiologic Studies collect information to expand our understanding of health effects of radiation, chemicals, and other hazards to current DOE workers and the public. The program facilitates interventions that reduce or eliminate worker risks and provides a means to evaluate these corrective actions once implemented. Information from this program is made available to workers and interested stakeholders through reports, presentations, and a public use data base.

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, 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.

Radiation Effects Research Foundation (RERF)

Mission Supporting Goals and Objectives

The United States has supported studies for more than 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, and in 1975, the Radiation Effects Research Foundation (RERF) was established as the full successor to the ABCC, according to an agreement between the governments of the United States and Japan.

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.

The Department is committed to the continued support of studies on the atomic bomb survivors as long as valuable health effects information can be gained by further follow-up of the survivors. Approximately 50,000 survivors are currently being followed in the RERF studies.

Gaseous Diffusion Plants

Mission Supporting Goals and Objectives

The Department of Energy has operated three gaseous diffusion plants (GDP): Paducah in Kentucky, Portsmouth in Pike County, Ohio, and K-25/East Tennessee Technology Park (ETTP) in Oak Ridge, Tennessee.

A number of serious environment, safety and health concerns have been raised by workers, the public and State and local government officials concerning past and present operations of the gaseous diffusion plants in the Department of Energy. In response to these concerns, the Secretary of Energy directed EH to conduct a number of environment, safety and health reviews, and to expand the existing worker medical surveillance program. Congress provided funding for these activities in an FY 2000 supplemental appropriation and the FY 2001 appropriation. These special reviews concluded that current operations do not present an immediate risk to workers or the public, however, significant "legacy" issues remain concerning past practices impact upon the environment, the public, worker safety and health, and clean-up of these sites.

These special reviews were essentially completed in FY 2001, and no additional funding is required in FY 2002 and FY 2003. EH will continue to monitor safety and health progress at these facilities.

Employee Compensation Initiative

Mission Supporting Goals and Objectives

Title XXXVI of the Defense Authorization Act of 2001 (the "Act") establishes the Energy Employees Occupational Illness Compensation Program to provide benefits to DOE contractor workers made ill as a result of exposures from nuclear weapons production. Subtitle D of the Act, "Assistance in State Workers' Compensation Proceedings," directs the Secretary of Energy to establish procedures to assist workers in filing compensation claims "under the appropriate State workers' compensation system" for work-related illnesses that are not covered by the program administered by the Department of Labor.

In order to assist workers, the Act provides that the Secretary:

Establish procedures to submit applications for review and assistance.

Review applications to determine that there is a reasonable evidence that it was filed by or on behalf of a DOE employee and that the illness or death may have been related to employment at a DOE facility.

Submit the application to a physicians panel to determine whether the illness or death arose out of and in the course of employment.

Assist the employee in obtaining additional evidence within the DOE's control that is relevant to the panel's deliberations.

Assist the applicant to file a claim based on the outcome of the panel's review under the appropriate State workers' compensation system.

Worker Advocacy activities recognize the special needs of DOE workers who were unknowingly exposed to dangerous materials or who were not adequately protected from these exposures. When illnesses force workers into retirement, many are left with little or no medical and/or wage benefits. The EH Office of Advocacy will assist DOE workers in understanding worker compensation requirements, and where appropriate, will assist in filing compensation claims. Program requirements include the maintenance of a toll-free hot line phone number; establishing liaison with state worker compensation programs; establishing contacts with DOE Operations Offices; establishing medical contacts; developing outreach and education programs for the DOE community, workers, unions, and states; and developing policies and procedures to assist workers with appropriate claims.

Program Direction

Mission Supporting Goals and Objectives

Program Direction in the Other Defense Activities 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 (FY01: 162 FTE; FY02: 161 FTE; FY03: 131 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 capability, as well as health studies endeavors; and perform activities relative to environment, safety, and health programs across the DOE complex. The FTE level for FY 2002 reflects the transfer of one staff person to the Oak Ridge Operations Office.

Travel includes all costs of transportation, subsistence, and incidental travel expenses of EH's Federal employees in accordance with the Federal travel regulations.

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

Other Related Expenses include training for Federal staff. Training includes tuition for EH Federal employees. Also included is full funding of pension and annuitant health care benefits.

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Corporate Safety Assurance	3,973	5,369	4,232	-1,137	-21.2%
Health Studies					
Occupational Medicine	15,731	24,077	16,600	-7,477	-31.1%
Public Health Activities	22,342	19,342	17,160	-2,182	-11.3%
Epidemiologic Studies	3,300	3,300	3,300	0	0.0%
International Health Programs					
Marshall Islands	6,300	6,300	6,300	0	0.0.%
European Programs	4,800	4,800	4,800	0	0.0.%
Total, Health Studies	52,473	57,819	48,160	-9,659	-16.7%
RERF	13,354	13,500	13,500	0	0.0%
Gaseous Diffusion Plants	11,973	0	0	0	0.0%
Employee Compensation Initiative	16,963	15,000	16,000	+1,000	+6.7%
Program Direction:					
Salaries and Benefits	18,267	17,318	16,057	-1,261	-7.3%
Travel	967	1,232	967	-265	-21.5%
Other Related Expenses	1,200	1,216	994	-222	-18.3%
Total, Program Direction	20,434	19,766	18,018	-1,748	-8.8%
Use of Prior Year Balances	0	-11,231	0	+11,231	100.0%
Total Environment, Safety and Health Other Defense	119,170	100,223	99,910	-313	-0.3%
Full Time Equivalents	162	161	131		

Detailed Safety Assurance Program Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Corporate Safety Assurance	2,401	3,208	3,000	-797	-21.0%
Enforcement	973	973	700	-273	-28.1%
DNFSB Liaison	599	599	532	-67	-11.2%
Information Technology Support	0	589	0	-589	-100.0%
Total	3,973	5,369	4,232	-1,137	-21.2%

Detailed Program Justification

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
EH Program	**3,973**	**5,369**	**2,392**
Corporate Safety Assurance	**2,401**	**3,208**	**3,000**

CSA serves as a centralized ES&H corporate asset to the Department, line management, and the Department's stakeholders. In this crosscutting role, the office can effectively employ its considerable ES&H technical experience and capabilities, as well as benchmarking against the successful programs and initiatives within the Department, the commercial nuclear sector, and private industry, to facilitate and contribute to continuous improvement and excellence in safety.

The activities of this office not only contribute to the assurance of the protection of our workers, the public, and the environment, but serve to contribute to the success and efficiency of its many and diverse missions through the effective integration of safety. The failure to effectively integrate ES&H into all phases of projects and activities can and has significantly impacted them including expensive delays, operational shutdowns, state imposed fines, and even cancellation or shutdown.

The funding of this office allows CSA to utilize a variety of mechanisms and activities including field assessments, performance monitoring and analysis, safety analyses, and accident investigations to keep senior DOE management appraised of the status of nuclear safety and performance across the complex, to assure hazardous activities are conducted safely, that the Department benefits from operational experience and lessons learned. CSA can contribute to line management through the review and improvement of ES&H programs that are critical to the success of DOE missions and business lines including programs such as ISM, criticality safety, radiation protection, chemical safety, industrial safety and health, configuration management, and fire protection.

Field assessments, diagnostic evaluations, and special reviews and investigations: These CSA activities are a core element of the office mission. Field assessments serve to confirm the effectiveness of, and contribute to continuous improvement in essential ES&H programs and processes. Diagnostic evaluations as well as special reviews and investigations are conducted in response to adverse safety performance, issues, or trends and serve to effectively identify root causes and contribute to effective corrective actions and improvements.

The increasing inclusion of line managers and staff on these CSA field assessments is increasing self-assessment capabilities as well as to improved sharing of successful programs, innovative initiatives, and best-practices across the complex.

Performance monitoring and analysis: The effective monitoring and analysis of performance information including ES&H performance metrics, events, accidents, and near-misses, and performance trends is critically important to the Department's capability to proactively respond to emerging problems and deficiencies, to prioritize management attention and resources, and to avoid serious accidents and injuries. As a central operating experience organization, CSA can also facilitate a more effective and efficient approach to the resolution of generic safety performance issues that impact a significant portion of the DOE complex.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Safety Analysis: CSA conducts independent evaluation of selected authorization bases, particularly as related to new nuclear facilities or changes in the life cycle status or hazards and facility conditions. These reviews assist the Department in assuring that all hazardous mission activities are conducted within a safety envelop that protects our workers, the public, and the environment. The office monitors positive USQs that may represent a reduction in safety margin from the authorization base, and the effectiveness of compensatory actions taken to assure safety.

Accident Investigation Program: CSA manages and implements the DOE/NNSA accident investigation program which has been recognized as one of the most effective programs in the industry. CSA leads Type A investigations for the most serious DOE accidents including fatalities, significant radiological or chemical exposures, serious injuries, significant environmental releases, or major damage to DOE facilities or equipment. CSA also supports continuous improvement in line management Type B investigations and provides comprehensive training for accident investigations and team leaders. The independence of CSA, extensive accident investigation experience, and disciplined investigative and analysis techniques provide an element of investigation effectiveness that could not be achieved by line management alone. This program contributes significantly to the Department's ability to learn from, and capitalize on the lessons learned from accidents, to prevent accident recurrence, to achieve continuous improvement in safety management and programs, and avoidance of the considerable costs and mission impacts of additional serious accidents.

The corporate safety mission of CSA allows the office not only to identify safety issues, performance problems, and adverse trends and vulnerabilities, but to work collaboratively with line management to identify solutions and opportunities for improvement. This corporate safety approach has proven extremely effective in the commercial nuclear industry in not only improving safety performance, but in increasing plant efficiency and availability and assuring continuous of the nuclear energy mission. Adequate funding of CSA programs and resources can significantly contribute to the safety performance and risk reduction as well as to the efficiency and continuation of the Department's many and diverse missions, projects, and activities.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Enforcement	**973**	**973**	**700**

Enforcement activities include full field investigations that may result in formal enforcement actions involving Notices of Violation related to Price-Anderson Amendments Act enforcement activities. Ninety-five percent of Notices of Violation issued to DOE contractors will result in actions to correct violations of DOE's nuclear safety requirements.

The performance measures for Enforcement are to conduct approximately 10-14 investigations that are independent, objective and resolve issues of alleged violations of DOE's nuclear safety requirements, and to foster compliance with DOE's nuclear safety requirements through the following compliance assistance efforts: (1) educating the DOE community; (2) coordinating and sharing lessons learned at the semiannual Energy Facilities Contractor Group meetings; and (3) issuing Enforcement Guidance Supplements as needed; (4) conducting Price-Anderson Amendments Act Program Reviews to provide feedback on contractor compliance and to recommend improvements. The complexity of litigation along with increased congressional interest in expanding the filed investigations justifies the minimal additional expenditures.

DNFSB	**599**	**599**	**532**

This is an on going program for coordinating the Defense Nuclear Facilities Safety Board recommendations process. The funding level is based on experience in performing the process. Performance success will be measured by reducing the number of outstanding actions and commitments for resolving environmental, health and safety issues identified by the DNFSB from 150 in October 2000 to 120 in October 2001 to 100 in October 2002. The Department's interface activities will continue to be managed with the Defense Nuclear Facilities Safety Board. The funding level was determined through experience. Responses to Defense Nuclear Facilities Safety Board reports and inquiries will continue to be coordinated. The Department's central repository of official Defense Nuclear Facilities Safety Board communications will continue to be maintained. The level has been deemed appropriate by previous experience and the actual costs of maintaining this essential services.

Information Technology Support	**0**	**589**	**0**

These funds were used for information technology to support the Safety Performance Program. The reduction in the Safety Performance Program in FY 03 eliminated the need for this funding.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Health Studies			
Occupational Medicine	**15,731**	**24,077**	**16,600**
Worker Medical Surveillance	**14,681**	**19,777**	**13,950**

Medical surveillance programs will continue to be implemented for former workers exposed to radioactive and other hazardous substances during their employment with DOE. This voluntary targeted medical screening will be based on the workers' highest occupational exposures, which can include any or all of the following: beryllium, asbestos, radiation, cadmium, chromium, silica, welding fumes, lead, solvents, mercury and noise. Some costs formerly incurred by DOE have been picked up by the Department of Labor, but DOE's expansion of the medical screening to additional sites not formerly served by the program will necessitate at least the same level of funding in FY 2003.

A registry of DOE workers exposed to beryllium through routine collection and analysis of medical information will continue to be supported.

Medical Surveillance Information System	**350**	**100**	**0**

A technical evaluation of the system has shown that it is feasible to transfer data from the field to Headquarters, although the transfer of huge amounts of data from each site is unwieldy. The system needs to be streamlined to collect only necessary and useful data and then pilot-tested with a few additional linkups to determine its practical applications. It is expected that this phase can be done in-house with no additional funds for FY 2003.

Line Management Support	**400**	**400**	**400**

As DOE's corporate source of competence and experience in occupational medicine, continue to support Operations Offices in their efforts to provide efficient delivery of quality occupational medicine services to workers through policy, standards, guidance development and dissemination. Issue a guide for the revised "Occupational Medicine" chapter of DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees." Establish a database for workplace violence information and analysis consistent with the issuance of the "Workplace Violence" DOE Order. Establish standards and guidance for the medical and psychological assessment requirements of the DOE Human Reliability Programs. Establish standards for the contractor employee assistance programs through the DOE technical standards program process. Continue to perform a central role in facilitating communication and coordination among the contractor occupational medicine programs and occupational health researchers in the complex by sponsoring meetings, establishing and maintaining web sites, and facilitating formal and informal communications that disseminate DOE policies, standards and guidance, including information from health studies and surveillance programs.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
REAC/TS	**300**	**300**	**300**

Continue 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. Continue support of REAC/TS maintenance of three Food and Drug Administration investigations of drug applications for DOE to be used for the treatment of internal deposition of radiological substances.

Health Information Technology Support	**0**	**3,500**	**1,950**

The massive amount of information and data needed to support the health studies program requires a dedicated and focused information technology effort. The support includes former worker medical surveillance information systems as well as the current worker occupational medicine programs, information support for the epidemiological analysis of worker injury and illness data, and provision of web-based information on worker health and safety, and international health studies using state-of-the-art Internet Portal technology. The Energy Employees Occupational Illness Compensation Program Act of 2000 (Title XXXVI of Public Law 106-389) requires a significant data collection and processing effort to carry out the provisions of the act. Information systems to support this initiative will require information sharing with several other Federal Agencies and State Worker Compensation systems. The FY 2003 reduction is due to termination of the Medical Surveillance Information System (MSIS) development effort, the completion of system upgrades and infrastructure investment required by the Energy Employees Occupational Illness Compensation Program Act of 2000 and other program initiatives, and the anticipated reduced demand for new systems upgrades or development.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Public Health Activities	**22,342**	**19,342**	**17,160**

Evidence from completed public health activities at sites throughout the DOE complex, health concerns voiced by workers and the community, and input from other stakeholders have defined the need for a directed research program designed to fill in gaps in our scientific knowledge about the long-term health impacts of DOE operations. In FY 2002, all public health activities have been integrated into a five-year plan for FY 2002-2006, developed collaboratively with the Department of Health and Human Services (DHHS) under a Memorandum of Understanding. The five-year plan will be updated annually with agency and stakeholder input.

Continue collaboration with the DHHS in implementing public health activities at each DOE site communicating their results.

Review and update the 5-year plan for public health activities at DOE sites in consultation with the DHHS.

Continue to seek input from stakeholders in order to ensure their health concerns are addressed in ongoing and planned public health activities. Through studies of DOE community and worker populations, increase information defining the relationship between exposures resulting from DOE facility operations and their effects on human health.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Epidemiologic Studies	**3,300**	**3,300**	**3,300**
Epidemiologic Surveillance	**2,300**	**2,300**	**2,300**

Expand the multi-site Epidemiologic Surveillance Program which conducts ongoing health monitoring of active workers, enhancing DOE's ability to protect worker health and identify potential health risks and occupational illnesses. The program provides a mechanism to improve the understanding of health effects associated with work at DOE sites and 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 and provides a multi-site health information data base linked to current workers. The program will continue to support enhancements of automated medical and industrial hygiene data management systems at participating sites to facilitate the collection of health data. Annual presentations of the results of epidemiologic surveillance analyses will be made to workers, management, and citizen's advisory groups at participating DOE facilities. An additional component of the Epidemiologic Surveillance Program is the Comprehensive Epidemiologic Data Resource. This public use data base provides access to health related data collected from many occupational and environmental epidemiologic studies performed by DOE during the past 40 years. Its internet capabilities facilitate dissemination of health-related information to DOE workers, DOE communities, and the general public. The size of the Comprehensive Epidemiologic Data Resource's holdings will significantly increase as data from a number of large research studies becomes available for the first time. The budget request will support: (1) ongoing epidemiologic surveillance to protect worker health through the identification of potential health risks and occupational illnesses; (2) enhanced integration of data from other existing health and safety programs with epidemiologic surveillance information; (3) continued refinement of the annual reports to include focus on additional occupational exposures, (4) greater use of electronic communication and internet resources to increase stakeholder access to epidemiologic surveillance information; (5) inclusion of additional DOE sites in surveillance; (6) additional focused analyses targeted at specific occupational injuries and illnesses; (7) refinement of a comprehensive summary of health trend information for participating sites throughout the DOE complex; (8) a new initiative to integrate Epidemiologic Surveillance into Integrated Safety Management planning; (9) greater emphasis on evaluating the success of safety and health initiatives; (10) funding for targeted research to develop more effective tools for surveillance; (11) more emphasis on coordination with internal and external working groups to promote sharing of health and safety information regarding illness and injury patterns; (12) a new initiative to establish a DOE-wide worker registry; (13) expanded operation of the Beryllium exposure registry at DOE sites; and (14) expansion of the public access data base maintained by the Comprehensive Epidemiologic Data Resource.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
U.S. Transuranium Registries	**1,000**	**1,000**	**1,000**

Continue support of the U.S. Transuranium and Uranium Registries (USTUR), a major component of DOE's long-standing programs that provide independent verification and refinement of the biokinetic models used to estimate workers' internal doses attributable to intake of long-lived radioactive materials. The Registries are uniquely successful in this research because they have enlisted occupationally exposed volunteers who have agreed to posthumously donate tissues, and because the USTUR laboratory can perform the complex radiochemical analyses of the tissues. Funding at this level will ensure that the USTUR can continue to accomplish the following: (1) verification of biokinetic parameters and models for assessing individual doses and risks from intakes of radionuclides, and possibly stable chemicals; (2) an archive and library of donated tissues, histopathology slides, and similar materials from animals for use by researchers worldwide; (3) assistance and consultations to other U.S. and foreign researchers, agencies and the public on various aspects of internal dosimetry and radiation protection standards.

International Health Programs	**11,100**	**11,100**	**11,100**
Marshall Islands	**6,300**	**6,300**	**6,300**

Continue to provide 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. Deliver year-round community-based medical services that encourage community involvement and provide more extensive medical care for the Rongelap and Utirik mandated populations. Offer community assistance to improve quality of health care infrastructure to service community-wide preventive medical programs. Perform radiological monitoring and dose assessment under the Rongelap and Enewetak Memorandum of Understanding and provide radiological monitoring technical assistance as needed at Bikini, Enewetak, Rongelap and Utrik atolls. Finalize most of the reports regarding information on the residual levels of radionuclides in the environment, effective mitigation strategies for reducing uptake of these radionuclides in local food products, and dose assessments to local atoll communities for use in making informed decisions on plans to resettle Bikini, Enjebi and Rongelap Islands.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
European Programs	**4,800**	**4,800**	**4,800**
JCCCNRS (Chernobyl)	**1,500**	**1,500**	**1,500**

Continue support of Chernobyl health effects studies. Combined, the long-term leukemia and thyroid disease 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. Studying those known to be exposed to high levels of radiation offers a basis for the development of better tools for assessing populations at risk and improved radiation standards for workers and the general population. Results from the thyroid disease studies in Ukraine and Belarus will provide 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. Continue implementing 30-year protocols calling for U.S. participation (DOE and the National Cancer Institute) for these two long-term studies through FY 2026. Continue implementing Phase II of the Leukemia Study through FY 2005.

JCCRER (Russian)	**3,000**	**3,000**	**3,000**

Continue the Joint Coordinating Committee for Radiation Effects Research (JCCRER) program in collaboration with Russia and other U.S. agencies. Continue studies which have the potential for a very strong return on investment by providing a continuing source of new information on the effects of chronic exposure to low to moderate dose rate radiation. Develop information for use in setting worker and public radiation protection standards in the U.S. and worldwide. Continue focus on epidemiologic and dose reconstruction studies based on worker and population radiation health data. Six major long-term environmental and occupational health studies have been completed. A major effort will be to integrate several databases into a single database that will link several groups of workers, thereby increasing the power of studies to find important associations. Continue ongoing long-term studies and initiate new studies to build on promising results from ongoing work to include effects of plutonium exposures, in depth studies of female workers, and effects of combined internal and external exposures. In contrast to DOE's support of studies of Japanese atomic bomb survivors, which has been ongoing for over 50 years, analysis of available long-term, low to moderate dose exposure Russian data has just begun. The outcomes of this research will determine whether and what kind of future work will be conducted to support the development of improved radiation protection practices and standards in the U.S.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Project Indalo	**300**	**300**	**300**

Continue the Project Indalo program which consists of medical surveillance and environmental monitoring in Palomares, Spain conducted since 1966. Over 1,500 residents have been tested throughout the 36-year program. Since 1984, approximately 150 different people are tested annually. In 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 and made recommendations in 1999 on future directions for the program. Provide input to the Spanish Government on the quantitative health risk assessment of Palomares residents.

Total, Health Studies	**52,473**	**57,819**	**48,160**
Radiation Effects Research Foundation (RERF)	**13,354**	**13,500**	**13,500**

Finalize and publish revision of 1986 Dosimetry System. Continue RERF research program and update epidemiologic data based on new A-bomb dosimetry data. Update of RERF Life Span Study, which is needed for developing radiation risk assessments.

Gaseous Diffusion Plants	**11,973**	**0**	**0**
Expanded Medical Surveillance	**8,723**	**0**	**0**
Epidemiology (Louisville & Kentucky)	**1,750**	**0**	**0**
Groundwater Modeling System	**1,500**	**0**	**0**

This activity concluded in FY 2001.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Employee Compensation Initiative	**16,963**	**15,000**	**16,000**

On December 7, 2000, the President signed an Executive Order directing the DOE to:

Provide the Secretary of Department Health and Human Services Department (HHS) and the Advisory Board on Radiation and Worker Health access to all relevant information pertaining to worker exposures.

Provide HHS and Department Of Labor any information relevant to claims made under this program.

Identify and notify potentially eligible individuals of the availability of compensation under this program.

Designate qualified atomic weapons employers and beryllium vendors whose employees may be eligible for this program.

Negotiate with States to ensure that compensation paid to DOE contractor employees conforms with existing State workers' compensation rules and regulations.

Establish a Worker Assistance Program to help potential claimants by administering the physician panel review process and assisting in filing State workers' compensation claims.

Report to Congress at least yearly on performance of the Worker Assistance Program.

In addition, the Executive Order called on the DOE to publish a list of atomic weapons employer facilities, DOE employer facilities, and beryllium vendors by January 15, 2001. This milestone was accomplished. An updated list was published in June 2001.

The purpose of this program is to recognize the special needs of DOE workers who were unknowingly exposed to dangerous materials or who were not adequately protected from these exposures. When illnesses force workers into retirement, many are left with little or no medical and/or wage benefits. The EH Office of Advocacy will assist DOE workers in understanding worker compensation requirements, and where appropriate, will assist in filing compensation claims. Program requirements include identifying and training staff, obtaining administrative support, establishing a toll-free hot line phone number, establishing liaison with state worker compensation programs, establishing contacts with DOE Operations Offices, and establishing medical contacts. Also, EH will develop outreach and education programs for the DOE community, workers, unions, and states, and develop policies and procedures to assist workers with appropriate plans.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Program Direction			
Salaries and Benefits	**18,267**	**17,318**	**16,057**
Salaries and Benefits reflect the FTE split between Energy Supply and Other Defense Activities. This category funds full-time permanent and other than full-time permanent employees: salaries, overtime pay, cash incentive awards, lump sum leave payments, Senior Executive Service and other performance awards, and payments to worker's compensation. The increases for Salaries and Benefits are based on the latest OMB economic assumptions (inflation rate of 4.9%) for Federal personnel costs.			
Travel	**967**	**1,232**	**967**
EH travel requirements are in line with the overall EH Federal staff.			
Other Related Expenses	**1,200**	**1,216**	**994**
Training, which includes tuition costs for the EH Federal employees, was previously budgeted in Management and Administration.			
Total, Program Direction	**20,434**	**19,766**	**18,018**

FTE's

The Office of Environment, Safety, and Health has budgeted in FY 2003 for a lower level of FTE's, continuing the downward trend initiated in FY 2002. This action has been taken in concert with the Secretary's DOE-wide initiative to conduct the Department's mission in a more effective and efficient manner and to improve the management and effectiveness of the Department. The Program Direction requested also is consistent with the ceiling guidance provided for the OMB Budget.

Other Related Expenses

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Training	125	150	125	-25	-16.7%
Pension and Annuitant health care benefits	1,075	1,066	869	-197	-18.5%
Total, Other Related Expenses	1,200	1,216	994	-222	-18.3%

Explanation of Funding Changes from FY 2002 to FY 2003

	FY 2003 vs. FY 2002 ($000)
Corporate Safety Assurance	
• Decrease due to efficiencies in operations	-1,137
Total Funding Change, Corporate Safety Assurance	-1,137
Health Studies	
• Decrease program for monitoring former DOE workers due to efficiency of operations.	-5,827
• Health Information Technology Support reduction is due to termination of the Medical Surveillance Information System (MSIS) development effort, the completion of system upgrades and infrastructure investment required by the Energy Employees Occupational Illness Compensation Program Act of 2000 and other program initiatives, and the anticipated reduced demand for new system upgrades or development.	-1,550
• Decrease funding for Medical Surveillance Information System. The system will be streamlined and can be done in-house with no additional funding	-100
• Decrease funding for Public Health Activity due to completion of certain studies	-2,182
Total Funding Change, Health Studies	-9,659
RERF	
• Funding for this program is unchanged.	0
Gaseous Diffusion Plants	
• This program concluded in FY 2001.	0
Employee Compensation Initiative	
• Funding will provide for the handling of the increased worker's compensation claims that are being filed. In addition, increased processing and support costs for records searches can be met, as well as costs for the hotline and advisory committee.	+12,231
Program Direction	
• Funding requirements for Salaries and Benefits are commensurate with the allocation of Federal staff among EH programs. Includes funding for cost of living adjustments, locality pay, within-grade increases, lump sum payments, and awards. Pensions and annuitant health care cost are lower. The rates used are based on EH actual experience and the latest OMB economic assumptions (inflation rate of 4.9%) for Federal personnel costs..	-1,748
Total, Other Defense Activities	**-313**