Non-Defense Environmental Management

Proposed Appropriation Language

For Department of Energy expenses, including the purchase, construction and acquisition of plant and capital equipment and other expenses necessary for non-defense environmental management activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction or expansion, [$236,372,000] *$166,000,000*, to remain available until expended. *(Energy and Water Development Appropriation Act, 2002.)*

Non-Defense Environmental Management

Program Mission

The Environmental Management (EM) program is responsible for managing and addressing the environmental legacy resulting from the production of nuclear weapons and nuclear energy research. The nuclear energy research and development efforts of the Department of Energy and its predecessors generated waste, pollution, and contamination which pose unique problems, including unprecedented volumes of contaminated soil and water, radiological hazards from special nuclear material, and a vast number of contaminated structures. Much of this infrastructure, waste, and contamination still exists and is largely maintained, decommissioned, managed, and remediated by the EM program, which is sometimes referred to as the "cleanup program." EM's responsibilities include facilities and areas at 114 geographic sites. These sites are located in 30 states and one territory and occupy an area equal to that of Rhode Island and Delaware combined -- or about two million acres.

The FY 2003 request for the Non-Defense Environmental Management appropriation is $166,000,000, a decrease of $70,372,000 from the comparable FY 2002 Appropriation of $236,372,000. EM manages and cleans up sites used for civilian, energy research, and non-defense related programs under this appropriation. Pursuant to the FY 1998 House Energy and Water Development Report (House Report 105-190), no technical assistance contracts, nor support service contracts are funded in the Non-Defense Environmental Management appropriation.

Program Strategic Performance Goals

The EM program has established a goal of cleaning up as many of its contaminated sites as possible by 2006 in a safe and cost-effective manner. By working towards this goal, EM can reduce the hazards presently facing its workforce and the public, and reduce the financial burden on the taxpayer. The EM program will:

- Continue to address the most serious environmental risks across the DOE complex and ensure that facilities and activities pose no undue risks to the public and worker safety and health.
- Continue surveillance and maintenance of facilities.
- Work aggressively with stakeholders and regulators to address the compliance challenges faced by the EM program.

One way EM is ensuring success is to manage the program based on sound performance measures that define and quantify programmatic strategic performance goals from the Departmental level down to the contractors performing the work. EM establishes specific performance measures and milestones on a project-by-project basis for the program within the context of the Environmental Quality Business Line and the Environmental Management Strategic Objectives. The EM program has been actively incorporating the requirements of the Government Performance and Results Act into its planning, budgeting, and management systems. At the programmatic level, these requirements are reflected in “corporate” performance measure and key milestone reporting and tracking. The EM management uses

the corporate performance measures along with other site-specific and project-specific objectives on an annual basis to ensure that progress is being made toward the goal of site closure and project completion.

Significant Accomplishments and Program Shifts

*Comparabilities*. The FY 2003 request has been prepared on a comparable basis. All activities and funds are displayed for FY 2001 and FY 2002 as if they were appropriated in the same appropriation and program account under which they are requested in FY 2003. The FY 2001 Appropriation and FY 2002 Appropriation have been adjusted to reflect the following comparabilities: movement of projects and/or activities between appropriations and/or program accounts; and shifts of projects and/or activities between sites.

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Non-Defense Environmental Management					
Site Closure	52,997	43,000	0	43,000	0
Site/Project Completion	100,631	64,119	0	64,119	51,272
Post 2006 Completion	137,107	125,753	0	125,753	112,887
Excess Facilities	0	3,500	0	3,500	1,841
Sub-Total, Non-Defense	290,735	236,372	0	236,372	166,000
Use of Prior Year Balances	-1,919	0	0	0	0
Total, Non-Defense	288,816	236,372	0	236,372	166,000

Public Law Authorization:

Public Law 95-91, “Department of Energy Organization Act (1977)”
Public Law 95-604, “Uranium Mill Tailings Radiation Control Act (1978)”
Public Law 96-368, “West Valley Demonstration Project Act of 1980"
Public Law 100-616, “Uranium Mill Tailings Remedial Action Amendments Act of 1988"
Public Law 103-62, “Government Performance and Results Act of 1993"
Public Law 106-377, “The Energy and Water Development Appropriations Act, 2001"
Public Law 107-66, “The Energy and Water Development Appropriations Act, 2002"

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque Operations Office					
Lovelace Respiratory Research Institute	561	1,391	1,072	-319	-22.9%
Los Alamos National Laboratory	3,850	2,500	1,848	-652	-26.1%
Total, Albuquerque Operations Office	4,411	3,891	2,920	-971	-25.0%
Chicago Operations Office					
Argonne National Laboratory - East	9,808	3,517	3,239	-278	-7.9%
Argonne National Laboratory - West	608	538	410	-128	-23.8%
Brookhaven National Laboratory	41,961	27,382	19,755	-7,627	-27.9%
Chicago Operations Office	2,000	870	452	-418	-48.0%
Total, Chicago Operations Office	54,377	32,307	23,856	-8,451	-26.2%
Idaho Operations Office					
Grand Junction	19,872	8,100	8,507	407	5.0%
Idaho National Engineering and Environmental Laboratory	1,440	5,054	4,338	-716	-14.2%
Moab Site	1,950	2,000	966	-1,034	>999.9%
UMTRA-Groundwater	13,252	7,101	5,673	-1,428	-20.1%
Total, Idaho Operations Office	36,514	22,255	19,484	-2,771	-12.5%
Oak Ridge Operations Office					
Weldon Spring Site	52,997	43,000	0	-43,000	-100.0%
Total, Oak Ridge Operations Office	52,997	43,000	0	-43,000	-100.0%
Oakland Operations Office					
Energy Technology Engineering Center	17,361	17,005	13,740	-3,265	-19.2%
General Atomics	1,067	298	200	-98	-32.9%
General Electric	0	100	0	-100	-100.0%
Laboratory for Energy-Related Health Research	5,843	5,864	4,798	-1,066	-18.2%
Lawrence Berkeley National Laboratory	4,030	4,925	3,746	-1,179	-23.9%
Oakland Operations Office	1,677	164	50	-114	-69.5%
Stanford Linear Accelerator Center	2,289	2,604	3,034	430	16.5%
Total, Oakland Operations Office	32,267	30,960	25,568	-5,392	-17.4%

	(dollars in thousands)				
	FY 2001	FY 2002	FY 2003	$ Change	% Change
Ohio Field Office					
West Valley Demonstration Project	105,140	90,000	90,000	0	0.0%
Richland Operations Office					
Hanford Site	1,485	1,800	1,331	-469	-26.1%
Excess Facilities	0	3,500	1,841	-1,659	-47.4%
Multi-Site Activities	3,544	8,659	1,000	-7,659	-88.5%
Subtotal, Non-Defense Environmental Management	290,735	236,372	166,000	-70,372	-29.8%
Use of Prior Year Balances	-1,919	0	0	0	>999.9%
Total, Non-Defense Environmental Management	288,816	236,372	166,000	-70,372	-29.8%

Site Closure

Program Mission

The Non-Defense Environmental Management, Site Closure account, includes the Weldon Spring Site in Missouri, which will successfully complete the environmental restoration and permanent on-site disposal of waste by the end of FY 2002.

Program Strategic Performance Goals

Accelerating cleanup and project completion are central goals of the EM program. Environmental Management sites are working to reduce outyear costs by safely completing projects as soon and as efficiently as possible. For the Site Closure account, the goal of the EM program has been to complete the cleanup mission by FY 2006, after which no further Departmental mission is envisioned, except for limited long-term surveillance and maintenance. The Weldon Spring Site has exceeded this goal by closing by the end of FY 2002. The EM program will:

- Accelerate cleanup efforts and realize substantial savings by the resulting reduction in long-term program costs and ongoing support costs.
- The restored land will be returned to interested stakeholders for unrestricted use and possible economic development.

One way EM is ensuring success is to manage the program based on sound performance measures that define and quantify programmatic strategic performance goals from the Departmental level down to the contractors performing the work. EM establishes specific performance measures and milestones on a project-by-project basis for the program within the context of the Environmental Quality Business Line and the Environmental Management Strategic Objectives. The EM program has been actively incorporating the requirements of the Government Performance and Results Act into its planning, budgeting, and management systems. At the programmatic level, these requirements are reflected in "corporate" performance measure and key milestone reporting and tracking. The EM management uses the corporate performance measures along with other site-specific and project-specific objectives on an annual basis to ensure that progress is being made toward the goal of site closure and project completion.

The chart below contains a summary of EM corporate performance measures for this program account.

Annual Performance Results and Targets [a]

	FY 2001 Actuals	FY 2002 Estimate	FY 2003 Estimate
Non-Defense Site Closure			
Number of Release Site Completions	2	3	0

Significant Accomplishments and Program Shifts

The Weldon Spring Site in Missouri will successfully complete the environmental restoration and permanent on-site disposal of waste by the end of FY 2002.

Funding Profile

(dollars in thousands)

	FY2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Site Closure	52,997	43,000	0	0	0
Total, Non-Defense Site Closure	52,997	43,000	0	0	0

Public Law Authorization:

Public Law 95-91, “Department of Energy Organization Act (1977)”

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

Public Law 106-377, “The Energy and Water Development Appropriations Act, 2001"

Public Law 107-66, “The Energy and Water Development Appropriations Act, 2002"

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Oak Ridge Operations Office	52,997	43,000	0	-43,000	-100.0%
Total, Non-Defense Site Closure	52,997	43,000	0	-43,000	-100.0%

[a] This chart provides a consistent set of performance measures for the total EM program. The more detailed project-level justification provides a description of significant activities for each project including project-specific milestones, as applicable.

Oak Ridge

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site Closure account at the Oak Ridge Operations Office is to direct and manage about 1,500,000 m^3 of waste at the 226 acre Weldon Spring Site Remedial Action Project in Missouri, which includes an abandoned decommissioned uranium processing plant, a contaminated quarry used for waste disposal, as well as numerous vicinity properties that were contaminated during processing operations.

Program Goal

The goal of this program is to complete the environmental restoration and permanent on-site disposal of waste at the Weldon Spring Site by the end of FY 2002. This will enable the early completion of restoration work to reduce health risks and free up funding to accelerate remediation goals at other Oak Ridge sites. The post remediation activities require long-term surveillance and maintenance, and may also require long-term treatment of groundwater if decided by the final site groundwater Record of Decision.

Program Objectives

The objective is to place all non-releasable contaminated material (soil, debris, pit waste) in the on-site disposal facility for long-term, permanent disposal. Raffinate pit waste was treated in the Chemical Stabilization/Solidification Facility utilizing state-of-the-art grout technology and placed in the disposal facility. Quarry waste held in temporary storage was placed in the disposal facility. Restricted use areas, including the disposal facility, will be placed under long-term surveillance and maintenance until restrictions are no longer needed. The long-term objective for restored land will be to return it to interested local stakeholders for unrestricted use and potential economic development. A stewardship plan in development will determine the appropriate, specific use of unrestricted land. Objectives are met through the long-time adherence to sound project management practices including the diligent management of project baselines, and the long time application of innovative fixed-price contracting.

Significant Accomplishments and Program Shifts

- Completed quarry remediation and initiated restoration (FY 2001).
- Completed final waste placement at the on-site disposal facility and cap installation nearly completed (FY 2001).
- Completed engineering for the quarry water treatment plant reclamation; and the interceptor trench became operational (FY 2001).
- Raffinate pit sludges have been placed into disposal facility and raffinate pits backfilled and graded (FY 2001).
- Complete quarry restoration (FY 2002).
- Complete disposal cap installation (FY 2002).
- Continue treatment of disposal facility leachate and quarry interceptor trench (FY 2002).
- Complete final site restoration, grading, and seeding; complete interpretive visitor's center facilities (FY 2002).
- Complete final site restoration; prepare to transition to long term stewardship (FY 2002).
- Continue work on groundwater operable unit Record of Decision or designated remedial action if Record of Decision has been approved (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
OR-715 / Weldon Spring Waste Treatment	930	0	0
OR-775 / Weldon Spring Disposal Facility	52,067	43,000	0
Total, Oak Ridge	52,997	43,000	0

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Weldon Spring Site Remedial Action Program	52,997	43,000	0	-43,000	-100.0%
Total, Oak Ridge	52,997	43,000	0	-43,000	-100.0%

Metrics Summary

	FY 2001	FY 2002	FY 2003
Release Site			
Cleanups	2	3	0

Site Description

The site, located 30 miles west of St. Louis, Missouri, was built by the Department of Army and used for explosives production until 1946. It was converted and operated for the Atomic Energy Commission as a feed materials plant between 1955 and 1966. During operations of the plant, the buildings, equipment, immediate terrain, process sewer system, and drainage easement to the Missouri River became contaminated.

The site consists of two separate facilities, the Weldon Spring Quarry (9 acres) and the Chemical Plant Site (217 acres). The latter includes the raffinate disposal areas (51 acres).

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Weldon Spring Site is managed through a fixed fee integrated contract utilizing innovative fixed price subcontracts to ensure the most cost efficient service to the Government. The projects included in this section of the budget have had an external, independent cost review by Lockwood Greene Inc. and Project Development Corporation. There is no FY 2003 funding request.

OR-715 / Weldon Spring Waste Treatment **930** **0** **0**

This project included the environmental restoration of four raffinate pits located at the Weldon Spring Chemical Plant site. These four surface impoundments were used to store slurries, sludges, and liquids from uranium processing activities performed from the 1950s to the 1960s. The scope of the project included dewatering of the raffinate pits; consolidation and removal of debris from the pits; removal and treatment of raffinate pit sludges; design, construction and operation of both pilot and full-scale sludge treatment plants; and removal of pit liners and backfill/grading of the raffinate pit areas.

No Activity. These activities are complete.

Metrics			
Release Site			
Cleanup	1	0	0

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
OR-775 / Weldon Spring Disposal Facility	**52,067**	**43,000**	**0**

This project provides an on-site disposal facility at Weldon Spring for the purpose of the restoration of the Weldon Spring chemical plant and quarry, as to place them in a radiologically/chemically safe condition in accordance with DOE guidelines to eliminate potential hazards to the public and the environment. The actions at the quarry includes removal of wastes dumped into the quarry; treatment of quarry pond water; and quarry restoration. A chemical plant site the remedial activities include the removal of former utilities/infrastructure; dismantling of 43 facilities; excavation of contaminated and waste; treatment of contaminated surface water; and construction of a 1,500,000 cubic yards disposal facility to house the building debris and contaminated soils and waste.

Project complete; long-term stewardship activities transfer to Idaho/Grand Junction beginning in FY 2003. Associated costs for regulatory reports and other contract closeout activities beyond FY 2002 will be funded with carryover dollars.

Metrics			
Release Site			
Cleanups	1	3	0
Key Milestones			
# Weldon Spring complete quarry backfill (June 2001).			
# Complete Weldon Spring disposal facility cap liner (September 2001).			

Total, Oak Ridge	52,997	43,000	0

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
OR-775 / Weldon Spring Disposal Facility	
# The Weldon Spring Site Remedial Action Project will be completed in FY 2002. Long-Term Stewardship activities will be conducted at Idaho/Grand Junction.	-43,000
Total Funding Change, Oak Ridge	-43,000

Site/Project Completion

Program Mission

The Non-Defense Environmental Management, Site/Project Completion account provides funding for projects that are expected to be completed by 2006 at sites or facilities where a Department of Energy (DOE) mission will continue (e.g., scientific research) beyond 2006.

This account includes projects and sites under the following operations offices: Albuquerque, Chicago, Idaho, Oakland, and Richland. In a limited number of cases, sites have been placed in the Site/Project Completion account even though there is no expectation of a continuing mission after cleanup is completed. In these instances, use of the Site Closure account would have created an additional appropriation control for an operations/field office with a limited amount of associated funding, thereby hindering managerial flexibility in the execution of projects at these sites.

Program Strategic Performance Goals

Accelerating cleanup and project completion are the central goals of the EM program. Environmental Management sites are working to reduce outyear costs by completing projects in the quickest, most efficient manner possible, thereby reducing life-cycle costs and schedules. For those sites funded within the Site/Project Completion account, the goal of the EM program is to complete as many projects as possible by 2006. The EM program will:

- Manage environmental cleanup projects at DOE sites where EM has established the goal of completion of all EM projects by FY 2006 (except for long-term stewardship activities), but where there will be a continuing Federal workforce at the site to carry out enduring non-EM missions, such as nuclear weapons activities or scientific research, and the necessary waste management activities to handle newly generated wastes from these missions.
- Work aggressively with stakeholders and regulators to address the compliance challenges faced by the EM program.

One way EM is ensuring success is to manage the program based on sound performance measures that define and quantify programmatic strategic performance goals from the Departmental level down to the contractors performing the work. EM establishes specific performance measures and milestones on a project-by-project basis for the program within the context of the Environmental Quality Business Line and the Environmental Management Strategic Objectives. The EM program has been actively incorporating the requirements of the Government Performance and Results Act into its planning, budgeting, and management systems. At the programmatic level, these requirements are reflected in "corporate" performance measure and key milestone reporting and tracking. The EM management uses the corporate performance measures along with other site-specific and project-specific objectives on an annual basis to ensure that progress is being made toward the goal of site closure and project completion.

The chart below contains a summary of EM corporate performance measures for this program account. Detailed performance measure information can be found in the site details that follow this program overview.

Annual Performance Results and Targets

	FY 2001 Actuals	FY 2002 Estimate	FY 2003 Estimate
Non-Defense Site/Project Completion			
Number of Release Site Completions	20	22	15
Number of Facilities Decommissioned	8	8	0
Number of Facilities Deactivated	1	0	0
Volume of Mixed Low-Level Waste Disposed (m^3)	1	1	11
Volume of Low-Level Waste Disposed (m^3)	159	10	0

Significant Accomplishments and Program Shifts

*Comparabilities*. The FY 2003 request has been prepared on a comparable basis. All activities and funds are displayed for FY 2001 and FY 2002 as if they were appropriated in the same appropriation and program account under which they are requested in FY 2003. The FY 2001 Appropriation and FY 2002 Appropriation have been adjusted to reflect the following comparabilities: movement of projects and/or activities between appropriations and/or program accounts; and shifts of projects and/or activities between sites.

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Site/Project Completion	100,631	64,119	0	64,119	51,272
Total, Non-Defense Site/Project Completion	100,631	64,119	0	64,119	51,272

Public Law Authorization:

Public Law 95-91, “Department of Energy Organization Act (1977)”

Public Law 95-604, “Uranium Mill Tailings Radiation Control Act (1978)”

Public Law 100-616, “Uranium Mill Tailings Remedial Action Amendments Act of 1988"

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

Public Law 106-377, “The Energy and Water Development Appropriations Act, 2001"

Public Law 107-66, “The Energy and Water Development Appropriations Act, 2002"

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque Operations Office	561	1,391	1,072	-319	-22.9%
Chicago Operations Office	54,377	32,307	23,856	-8,451	-26.2%
Idaho Operations Office	29,512	14,840	13,185	-1,655	-11.2%
Oakland Operations Office	14,696	13,781	11,828	-1,953	-14.2%
Richland Operations Office	1,485	1,800	1,331	-469	-26.1%
Total, Non-Defense Site/Project Completion	100,631	64,119	51,272	-12,847	-20.0%

Albuquerque

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site/Project Completion account, managed through the Albuquerque Operations Office, is to support activities at the Lovelace Respiratory Research Institute in New Mexico.

Program Goal

The Albuquerque Operations Office Environmental Management Program, through a cooperative agreement, supports treatment, storage, and disposal of wastes generated from the Department's mission-related work at the Lovelace Respiratory Research Institute. The Office of Science, the landlord, is considering integrating waste management activities into the landlord program.

Program Objective

Until the transition of the Lovelace Respiratory Research Institute to the landlord occurs, the Albuquerque program objective is to: manage generated waste, including the treatment, storage, and disposal of low-level, mixed low-level, transuranic, and hazardous wastes; support program management activities for the waste management/environmental restoration programs; and continue groundwater surveillance and monitoring. The site currently operates under a cooperative agreement with the Department of Energy to conduct biomedical research. It is assumed that the cooperative agreement will remain in place until FY 2006.

Significant Accomplishments and Program Shifts

- Continued monitoring groundwater at the Lovelace Respiratory Research Institute (FY 2001/AL005).
- Continued compliant treatment, storage, and disposal of waste from the Lovelace Respiratory Research Institute (FY 2001/AL005).
- Completed Groundwater Monitoring Reports (FY 2001/AL005).
- Continued to manage DOE generated waste at the Lovelace Respiratory Research Institute as long as a DOE mission continues to exist under the Cooperative Agreement (FY 2001 and FY 2002/AL005).

Continue groundwater monitoring of former environmental restoration sites and submit reports to the New Mexico Environment Department (FY 2002/AL005).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
AL-005 / Lovelace Respiratory Research Institute	561	1,391	1,072
Total, Albuquerque	561	1,391	1,072

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Lovelace Respiratory Research Institute	561	1,391	1,072	-319	-22.9%
Total, Albuquerque	561	1,391	1,072	-319	-22.9%

Metrics Summary

	FY 2001	FY 2002	FY 2003
The project in the Detailed Program Justification has associated metrics; however, no metrics are reportable in the 3-year budget profile.			

Site Description

Lovelace Respiratory Research Institute

The Lovelace Respiratory Research Institute is located on Kirtland Air Force Base in Albuquerque, New Mexico. The site currently operates under a cooperative agreement with the Department of Energy to conduct biomedical research. All of the environmental restoration sites have been cleaned up. Monitoring and surveillance of the sites continue to support closure and to monitor the reduction of nitrates in groundwater beneath the former wastewater lagoons. The Environmental Management Program manages hazardous, low-level radioactive, mixed, transuranic, and non-hazardous biomedical wastes generated from on-going DOE research activities in an efficient and environmentally sound manner.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

This Albuquerque Site is managed through a performance based management and operating contract to assure the most cost-effective services to the government. The scope planned for FY 2003 has been reviewed and is appropriate to meet the goals of the site as outlined in the EM sites' baseline planning data. The funds requested for FY 2002 are appropriate based on historical costs for similar work.

AL-005 / Lovelace Respiratory Research Institute 561 1,391 1,072

This project provides compliant waste management for biomedical research waste and environmental restoration groundwater monitoring and surveillance.

- **#** Continue groundwater monitoring of former environmental restoration sites and submit reports to the New Mexico Environment Department.
- **#** Continue the cleanup of the labs as they are vacated and dispose of the chemicals generated from those lab cleanups.

Key Milestones
Complete Groundwater Monitoring Reports (September 2001).
Dispose of excess/old chemicals as hazardous waste (September 2001).
Dispose of excess/old chemicals (September 2002).
Make shipment of low-level waste to the Nevada Test Site (September 2002).
Surveillance and Monitoring (September 2002).
Groundwater monitoring reports (September 2002).
Groundwater monitoring reports (September 2003).
Surveillance and Monitoring (September 2003).
Disposal of excess/old chemicals (September 2003).

Total, Albuquerque 561 1,391 1,072

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
AL-005 / Lovelace Respiratory Research Institute	
# Decrease in funding requirement reflects reduced volume of legacy waste	-319
Total Funding Change, Albuquerque	-319

Chicago

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site/Project Completion account, carried out by the Chicago Operations Office, is to direct and manage EM activities at the following sites: the Argonne National Laboratory-East in Illinois; the Argonne National Laboratory-West in Idaho; and the Brookhaven National Laboratory in New York. Planned Environmental Management activities have been completed at the Ames Laboratory in Iowa and the Princeton Plasma Physics Laboratory in New Jersey.

The primary mission of the facilities under the Chicago Operations Office is research, development, and demonstration for DOE's Office of Science and Nuclear Energy programs. This includes energy research and development; basic and applied research on the fundamental properties of matter, physics, life and environmental sciences; magnetic confinement fusion and high-energy physics. The primary component of the Chicago Environmental Management Program in FY 2003 is environmental restoration. Environmental restoration activities managed by the Chicago Operations Office include the cleanup of groundwater, soil and debris contaminated with radionuclides and/or hazardous substances, and decontamination and decommissioning of facilities with radiological contamination.

The Chicago environmental restoration strategy focuses on maximizing near-term site completions, and optimizing the sequencing of work . This strategy has proven to be successful in that environmental restoration activities have been completed at several Chicago sites, including Ames Laboratory and Princeton Plasma Physics Laboratory, thereby, allowing allocated funding to be devoted to fewer remaining sites.

Waste management responsibilities for newly generated waste, formerly managed under the Environmental Management Program, were transferred in FY 2001 to the Office of Science for Ames, Argonne National Laboratory-East, Brookhaven National Laboratory, and the Princeton Plasma Physics Laboratory. Waste management responsibilities for the Argonne National Laboratory - West were previously transferred to the Office of Nuclear Energy. Management for surveillance and monitoring of the Princeton Plasma Physics Laboratory Site C/D was also transferred to the Office of Science in FY 2001.

Program Goal

The goal is to complete cleanup of all current baselined scope for Chicago managed sites and transfer long-term surveillance and maintenance activities to the landlord programs after completion of site cleanup activities.

The Brookhaven High Flux Beam Reactor was accepted into the EM program in April 2000. Decommissioning plans are being developed. Beginning in FY 2002, funding for the High Flux Beam Reactor decommissioning project is included in a new, separate program account, Excess Facilities. Surveillance and maintenance will continue for the High Flux Beam Reactor in FY 2003.

Program Objectives

The objective is to manage the risks associated with sites contaminated with various hazardous and radioactive materials. This includes responsibility for the assessment and remediation of contaminated sites and facilities; environmental safety; and completion of decontamination and decommissioning of surplus facilities in the current EM baseline.

Environmental restoration activities are continuing for the Argonne National Laboratory-East and the Brookhaven National Laboratory under the Argonne National Laboratory-East Resource Conservation and Recovery Act Part B Corrective Action permit and the Brookhaven National Laboratory Interagency Agreement/Federal Facilities Agreement respectively.

In addition, continuing operation and maintenance activities for soil remediation (phytoremediation activities of planting and harvesting), monitoring, and verification sampling will be performed at the Argonne National Laboratory-West under the Argonne National Laboratory-West Federal Facility Agreement Consent Order.

Significant Accomplishments and Program Shifts

- At Brookhaven National Laboratory, continued on-site and off-site groundwater treatment systems and soil vapor extraction systems and design and install additional groundwater treatment systems. Began remediation for contaminated soils and out-of-service tanks at the Waste Concentration Facility and Building 650 (Hot Laundry). Treat and dispose of most remaining legacy waste at the Former Hazardous Waste Management Area. Continued characterization, and complete removal of Above Grade Ducts and continue characterization and assessment activities for Below Grade Duct work for the Graphite Research Reactor decommissioning (FY 2001).
- At Brookhaven National Laboratory, the remediation of contaminated soils and out-of-service tanks at Building 811 Waste Concentration Facility and Building 650 (Hot Laundry) will be completed. Demolition will begin of buildings at the Former Hazardous Waste Management Facility. Operation and monitoring of existing groundwater treatment systems will continue. Design will be completed and installation activities initiated for additional groundwater treatment systems. Surveillance and maintenance and characterization activities will continue at the Brookhaven Graphite Research Reactor (FY 2002).
- At Argonne National Laboratory-East, corrective actions for the East-Northeast 319 Area Landfill were completed and will continue for the 800 Area Suspect Solid Waste Landfill and the 317 Area Deep and North Vaults. Lime sludge removal and operation and maintenance activities will also continue. Completed decontamination and decommissioning of the 60-inch Cyclotron Reactor.

Continued decontamination and decommissioning of the Building 310 Retention Tank Facility; and initiated field work on the following decontamination and decommissioning activities: Juggernaut Reactor (assessment activities) and the Building 301 Hot Cells project (FY 2001).

- At Argonne National Laboratory-East, the remediation of the 317 Area Deep Vault will be completed. Corrective actions will begin on the 319 Area Shooting Range and Building 310 Retention Tanks and Sumps integrity testing, and continue on the 317 Area North Vault, and 317 Area East Vaults Footing Drain, and 800 Area Suspect Solid Waste Landfill. Lime sludge removal and operation and maintenance activities will also continue. Some work on the Building 310 Retention Tanks decontamination and decommissioning project will continue. Work will also continue on the Building 301 Hot Cells decontamination and decommissioning project (FY 2002).
- At Argonne National Laboratory-East, 95 cubic meters of transuranic waste will be shipped to the Waste Isolation Pilot Plant. Note: Funding for this activity was requested by Carlsbad in the Defense Environmental Restoration and Waste Management appropriation (FY 2002).
- At Argonne National Laboratory-West, continued operation and maintenance activities for soil remediation (i.e. phytoremediation). The FY 2000 draft summary report of phytoremediation results for the first two years was prepared and submitted to the regulators for approval. Geographic site completion was planned for the Argonne National Laboratory-West (FY 2001).
- At Argonne National Laboratory-West, continue operation and maintenance activities for soil remediation (phytoremediation activities of planting and harvesting) (FY 2002).
- Management for continued surveillance and monitoring of the Princeton Plasma Physics Laboratory Site C/D was transferred to the Office of Science in FY 2001.
- Potentially Responsible Party payments will be made against DOE's portion of the Princeton University Site A/B remediation costs as a Potentially Responsible Party (FY 2001/FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
CH-ANLEDD / Argonne National Laboratory-East Decontamination and Decommissioning Actions	5,569	0	383
CH-ANLEPM / Argonne National Laboratory-East Program Management	512	280	207
CH-ANLERA / Argonne National Laboratory-East Remedial Actions	3,727	3,237	2,649
CH-ANLWRA / Argonne National Laboratory-West Remedial Actions	608	538	410
CH-BRNLBYW / Brookhaven National Laboratory Boneyard Waste	7,795	0	0
CH-BRNLDD / Brookhaven National Laboratory Graphite Research Reactor	9,844	3,424	2,048
CH-BRNLPM / Brookhaven National Laboratory Program Management	5,091	2,000	1,478
CH-BRNLRA / Brookhaven National Laboratory Remedial Actions	19,231	21,958	16,229
CH-CHOOPUAB / Princeton Site A/B Payments	5	220	127
CH-COPS / CH Operations Program Support	0	650	325

CH-CRE / Chicago Center for Risk Excellence	1,995	0	0
Total, Chicago	54,377	32,307	23,856

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Argonne National Laboratory-East (IL)	9,808	3,517	3,239	-278	-7.9%
Argonne National Laboratory-West (ID)	608	538	410	-128	-23.8%
Brookhaven National Laboratory (NY)	41,961	27,382	19,755	-7,627	-27.9%
Chicago Operations Office (IL)	2,000	870	452	-418	-48.0%
Total, Chicago	54,377	32,307	23,856	-8,451	-26.2%

Metrics Summary

	FY 2001	FY 2002	FY 2003
Release Site			
Cleanups	12	2	2
Facilities Decommissioning			
Cleanup	5	8	0

Site Description

AMES Laboratory (Iowa State University)

Ames Laboratory is an Office of Science laboratory in Ames, Iowa that conducts basic and applied research in the preparation, characterization, and evaluation of properties of metals and their alloys, especially rare earth metals. Ames Laboratory also performs materials research, high-performance computing, and environmental research. It seeks solutions to energy-related problems through the exploration of physics, chemistry, engineering, applied mathematics, and materials sciences.

Argonne National Laboratory-East

Argonne National Laboratory-East is a research laboratory occupying a 700 acre tract of land located approximately 22 miles southwest of downtown Chicago in DuPage County, Illinois. It is an Office of Science multidisciplinary research and development laboratory that conducts basic and applied research to support the development of energy-related technologies. Energy-related research projects include safety studies for light-water reactors, developing components and materials for fission and fusion reactors, superconductivity research, improvements in coal power, synchrotron radiation sources, and waste heat utilization. Further research includes medical radioisotope technology, environmental

research, genetics research, materials engineering, ceramics, carcinogenesis, and the biological effects of ionizing radiation. Argonne-East is the home for the Advanced Photon Source Facility, which provides experiment capability with the use of photons for industry, government, and academic scientists to create advances in pharmaceuticals, adhesives, food processing, and many other applications.

Argonne National Laboratory-West

The Argonne National Laboratory-West site is located 35 miles west of Idaho Falls, Idaho, and is operated by the University of Chicago under the direction of the Chicago Operations Office. The site was constructed for the purpose of carrying out research and development for liquid metal fast breeder reactor technology. The current mission for the Argonne National Laboratory-West includes technology development for spent nuclear fuel and radioactive waste treatment, and reactor and fuel cycle safety. These activities are administered through the Office of Nuclear Energy.

Brookhaven National Laboratory

The Brookhaven National Laboratory site is an Office of Science multi-purpose research and development laboratory located in central Suffolk County on Long Island, about 60 miles east of New York City. Brookhaven National Laboratory's current mission is to conduct fundamental research, including conception, design, construction, and operation of large complex research facilities. These facilities are used for both basic and applied research in high energy and nuclear physics; in basic energy sciences emphasizing fundamental research on biological, chemical, and physical phenomena underlying energy-related transfer, conversion and storage systems; in life sciences; and in nuclear medical applications of nuclear techniques.

Princeton Plasma Physics Laboratory

The Princeton Plasma Physics Laboratory in Princeton, New Jersey, is an Office of Science single purpose laboratory focusing on research and development for fusion energy programs. The Laboratory is engaged in a broad spectrum of plasma physics research ranging from the theoretical analysis and modeling of fusion plasmas to the laboratory testing of plasmas approaching the conditions necessary for an energy producing fusion reactor.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Chicago EM program makes extensive use of firm fixed-price management and integration subcontracts and other subcontracting mechanisms, such as basic ordering agreements and time and material subcontracts, to assure the most cost-effective services to the government.

The two major environmental restoration programs at the Argonne National Laboratory-East and the Brookhaven National Laboratory have had independent cost, scope, and schedule reviews by the Army Corps of Engineers and are baselined and under formal change control procedures. The Brookhaven National Laboratory had independent reviews performed by the EM Office of Project Management in May 2000 and by a team assembled by the DOE National Energy Technology Laboratory in April 2001. The Argonne National Laboratory - East also had a comprehensive independent review of its remediation and decontamination and decommissioning programs in November 2000. Waste management activities were transferred to the Office of Science in FY 2001, as well as surveillance and monitoring of the Princeton Plasma Physics Laboratory Site C/D.

CH-ANLEDD / Argonne National Laboratory-East

Decontamination and Decommissioning Actions	**5,569**	**0**	**383**

This project conducts facility decontamination and decommissioning activities at the Argonne National Laboratory-East.

Conduct minimal surveillance and maintenance of surplus radiologically contaminated buildings and grounds.

Metrics			
Facilities Decommissioning			
Cleanup	4	6	0
Key Milestones			
# Complete all activities associated with the 60 inch Cyclotron Decontamination and Decommissioning Project (March 2001).			

CH-ANLEPM / Argonne National Laboratory-East Program

Management	**512**	**280**	**207**

This project provides program management support activities to provide a safe and effective environmental management program to reduce environmental and health risks, including support of environmental and compliance, quality assurance, safety and health, project cost and schedule support, and sample and data management.

Continue to support the Argonne National Laboratory-East Remedial Action and Decommissioning and Decontamination programs, including cost estimating, budgeting, performance monitoring, reporting, and regulatory interface.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

CH-ANLERA / Argonne National Laboratory-East Remedial Actions 3,727 3,237 2,649

This project conducts remediation activities at the Argonne National Laboratory-East to reduce risk and comply with the Resource Conservation and Recovery Act permit.

- # Complete characterization of the 320 Area Shooting Range and continue the Lime Sludge removal operations and maintenance activities.
- # Complete remediation of the 317 Area Deep Vault.
- # Complete remediation of the 800 Area Suspect Solid Waste Landfill.

Metrics			
Release Site			
Cleanups	4	0	2

Key Milestones

- # East North East Landfill Final Construction report and request for No Further Action (September 2001).
- # Submit to DOE request for approval of No Further Action for Solid Waste Management Unit #743 - "317 Area Deep Vault" (September 2002).
- # Request for approval of No Further Action for Solid Waste Management Facility #498 "320 Area Shooting Range" (June 2003).

CH-ANLWRA / Argonne National Laboratory-West Remedial Actions 608 538 410

This project conducts activities at the Argonne National Laboratory-West Waste Area Group 9 to assess and reduce risk and comply with the Federal Facilities Agreement/Consent Order. All remediation activities have been completed except for continuing operation and maintenance activities for soil remediation (phytoremediation activities of planning and harvesting), monitoring, and verification sampling. Geographic site completion is planned for FY 2001.

- # Conduct verification sampling of soil at release sites where phytoremediation has been implemented. Verification sampling will ensure all remediation goals have been met.
- # Dispose of all harvested plant matter.
- # Prepare verification sampling report and submit to regulatory agencies.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Metrics			
Release Site			
Cleanups	4	0	0
Key Milestones			
# Mission complete (September 2001).			

CH-BRNLBYW / Brookhaven National Laboratory Boneyard Waste 7,795 0 0

This project treats and disposes of legacy wastes at the Former Hazardous Waste Management Area, such as bin sludges, connex and concrete containers, dry active wastes, and shielding blocks/debris. Wastes must be disposed before soil remediation in this area can begin. All on-site activities are expected to be completed in FY 2002.

This project was completed in FY 2002. No activities are planned for FY 2003.

Key Milestones
Mission complete (September 2001).

CH-BRNLDD / Brookhaven National Laboratory Graphite Research Reactor 9,844 3,424 2,048

This project characterizes, stabilizes, decontaminates and decommissions the Brookhaven Graphite Research Reactor. The Brookhaven Graphite Research Reactor is an Agreement of Concern under the Brookhaven National Laboratory Interagency Agreement.

Continue surveillance and maintenance activities and removal actions for the Above Grade Ducts and Below Grade Ducts.

Metrics			
Facilities Decommissioning			
Cleanup	1	2	0
Key Milestones			
# Draft final completion report Brookhaven Graphite Research Reactor above grade duct (May 2001).			

(dollars in thousands)

FY 2001	FY 2002	FY 2003

CH-BRNLPM / Brookhaven National Laboratory Program Management 5,091 2,000 1,478

This project provides program management support activities to provide a safe and effective environmental management program to reduce environmental and health risks, including: support of environmental compliance, quality assurance, safety and health; project cost and schedule support; and sample and data management. Through FY 2001, it also included grant funding for an Interagency Agreement with New York State Department of Environmental Conservation for oversight of Brookhaven's environmental restoration program.

Continue programmatic supervision activities, including cost and schedule control, project integration and reporting, community relations, regulatory actions and engineering support. The New York State Interagency Agreement oversight funding was moved to PBS CH-BRNLRA, Brookhaven National Laboratory Remedial Actions.

Key Milestones	
#	Issue Interagency Agreement Schedule Update to the Environmental Protection Agency/Department of Environmental Conservation (November 2001).

CH-BRNLRA / Brookhaven National Laboratory Remedial Actions 19,231 21,958 16,229

This project addresses areas with known or potential risks to human health and the environment under a Superfund Interagency Agreement among DOE, the U.S. Environmental Protection Agency, and the New York State Department of Environmental Conservation. Groundwater, soil, and sediment cleanup activities are included. Funding for the IAG-required oversight grant to the New York State Department of Environmental Conservation is also included under this PBS as of FY 2002.

Continue sitewide monitoring and data management activities; the design, operation and construction of groundwater treatment systems; and the demolition of buildings at the Former Hazardous Waste Management Facility.

Initiate pilot studies, assessment and stakeholder outreach will be performed for the Peconic River to determine the most appropriate cleanup plan.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Metrics			
Release Site			
Cleanups	4	2	0
Key Milestones			
# Submit Building 650 Soil Remedial Action Work Plan to the Environmental Protection Agency/Department of Environmental Conservation (July 2001).			
# Submit 90 percent North Street East design to the Environmental Protection Agency/Department of Environmental Conservation (July 2002).			
# Construction complete airport system (March 2003).			
# Operable Unit Five remedial action work plan to DOE (August 2003).			

CH-CHOOPUAB / Princeton Site A/B Payments 5 220 127

Potentially responsible party payments are required to cover DOE's responsibility, as a previous lessee, for a portion of the characterization/remediation costs for Princeton University's Site A/B, in accordance with the New Jersey Department of Environmental Protection/Princeton University Memorandum of Understanding and DOE/Princeton University Memorandum of Agreement.

Payment of DOE's yearly portion, as a Potentially Responsible Party, for characterization and remediation costs.

CH-COPS / Chicago Operations Program Support 0 650 325

This project provides support for the two Congressional/Departmental Priorities the United Negro College Fund Second Nature/Environmental Stewardship, and the U.S. Fish and Wildlife Brookhaven National Laboratory Agreement.

Provide funding to the United Negro College Fund Second Nature/Environmental Stewardship.

Provide funding to the U.S. Fish and Wildlife Brookhaven National Laboratory Agreement.

CH-CRE / Chicago Center for Risk Excellence 1,995 0 0

The DOE Center for Risk Excellence is a corporate resource responsible for ensuring visibility and use of risk information in program management, including internal DOE decision making, priority setting access to basic risk resources, and communications with stakeholders.

No activity in FY 2003.

Total, Chicago 54,377 32,307 23,856

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
CH-ANLEDD / Argonne National Laboratory-East Decontamination and Decommissioning Actions	
# Increase in funding provides for surveillance and maintenance activities	383
CH-ANLEPM / Argonne National Laboratory-East Program Management	
# No significant change	-73
CH-ANLERA / Argonne National Laboratory-East Remedial Actions	
# Decrease in funding reflects a delay in the completion of all planned corrective actions under the Resource Conservation and Recovery Act Part B permit	-588
CH-ANLWRA / Argonne National Laboratory-West Remedial Actions	
# Decrease in funding reflects the delay of final planting and harvesting and verification sampling as part of operation and maintenance activities	-128
CH-BRNLDD / Brookhaven National Laboratory Graphite Research Reactor	
# In FY 2003, the administration proposes to reduce this activity to permit Environmental Management to accelerate risk reduction elsewhere	-1,376
CH-BRNLPM/Brookhaven National Laboratory Program Management	
# Decrease in funding reflects the lower level of support required due to deferral of all decontamination and decommissioning activities	-522
CH-BRNLRA / Brookhaven National Laboratory Remedial Actions	
# In FY 2003, the administration proposes to reduce this activity to permit Environmental Management to accelerate risk reduction elsewhere	-5,729
CH-CHOOPUAB / Princeton Site A/B Payments	
# Decrease in funding reflects estimated lower costs for DOE's portion of characterization and remediation costs	-93
CH-COPS / Chicago Operations Program Support	
# Decrease reflects continuation of these activities at a reduced level	-325
Total Funding Change, Chicago	-8,451

Idaho

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site/Project Completion account, managed by the Idaho Operations Office is to provide facilities and equipment required for interim dry storage of fuel bearing materials currently in the Test Area North Hot Shop Pool. The pool inventory includes Three Mile Island Unit-2 core debris, Loss of Fluid Test fuel, and small quantities of commercial fuels. This program will also provide for the removal of spent nuclear fuel from wet storage basins in the Materials Test Reactor and Power Burst Facility. This program will also manage cleanup of all release sites assigned to the program and continue several longer-term programs as required. The release sites include the 57 acre Grand Junction Office facility, the Monticello mill site in Utah, and the 22 inactive uranium millsites that were designated by Congress for cleanup by the Uranium Mill Tailings Radiation Control Act of 1978. Continuing missions include the Long-Term Surveillance and Maintenance Program and the Uranium Lease Management Program. The current mission also includes facility and waste management of the Grand Junction Office site. It is no longer cost-effective to operate and maintain the entire 57 acre Grand Junction Office for the planned mission. The Department is working with the Grand Junction community to identify options for making all or part of the facility available for other productive uses, while continuing the Grand Junction Office mission in Grand Junction. The Grand Junction projects were previously the responsibility of the Albuquerque Operations Office.

Program Goal

Throughout the DOE complex, EM is focused on accelerating cleanup and, where possible, completing its mission by FY 2006. At the Idaho National Engineering and Environmental Laboratory, both of the non-defense elements of the EM mission will be completed within the FY 2006 time frame. Spent nuclear fuel will be removed from wet storage basins in the Materials Test Reactor and Power Burst Facility, and these facilities will be deactivated. The Three Mile Island Unit-2 fuel will be in safe, dry storage, and EM's National Low-Level Waste Program responsibilities will be completed. The continued monitoring of Three Mile Island Unit-2 fuel and the operation of the Independent Spent Fuel Storage Installation Facility will be funded under the Defense Environmental Restoration and Waste Management Post 2006 Completion Idaho account.

The goal for the Grand Junction Office is to complete the site cleanup, transfer site ownership for alternative uses by the end of FY 2001, and to continue DOE's mission utilizing a small portion of the facility under a lease-back arrangement.

Program Objective

One objective of the program was achieved by completing construction of the Three Mile Island Unit-2 fuel storage facility in FY 1999. Future objectives include completing the majority of non-defense activities in the Spent Nuclear Fuel Stabilization Program and reducing surveillance and maintenance costs by deactivating two excess reactors.

One objective of the Grand Junction Office is cleanup of the Monticello, Utah mill which was completed in FY 2000 and vicinity property sites, with the exception of the remediation of the contaminated groundwater, for which a source removal and interim remedial action strategy is being pursued through FY 2005. The Grand Junction Office will continue to manage the Long-Term Surveillance and Maintenance, Uranium Leasing, Maxey Flats, and Pinellas environmental restoration programs, as well as the ongoing Uranium Mill Tailings Remedial Action Groundwater Project, and the recently authorized Moab, Utah uranium mill tailings cleanup.

Significant Accomplishments and Program Shifts

Idaho National Engineering and Environmental Laboratory

- Complete Idaho Nuclear Technology and Engineering Center preparations to transfer Materials Test Reactor spent nuclear fuel; begin transfer of Materials Test Reactor spent nuclear fuel to the Irradiated Fuel Storage Facility at Idaho Nuclear Technology and Engineering Center; continue Power Burst Facility readiness to transfer spent nuclear fuel to Idaho Nuclear Technology and Engineering Center (FY 2002/ID-OIM-110-N).
- Completed surveillance and maintenance activities at the Power Burst Facility and the Materials Test Reactor (FY 2001/ID-OIM-112N).
- Perform surveillance and maintenance of the Power Burst Facility 620 (canal reactor building) and at the Materials Test Reactor Canal (FY 2002/ID-OIM-112N).
- Completed fabrication, delivery, and acceptance of equipment to support acceptance of the horizontal storage modules and dry shielded canisters. The dry shielded canisters were used to transfer the Three Mile Island Unit-2 spent nuclear fuel from Test Area North to the Idaho Nuclear Technology and Engineering Center and to store the fuel in the independent spent fuel storage facility horizontal storage units (FY 2001/ID-SNF-104-N).
- Initiate the construction and equipment activities of the Loss of Fluid Test and commercial fuel storage equipment (FY 2002/ID-SNF-104-N).

Monticello Projects

- Complete mill site restoration and restoration oversight; continue groundwater Operable Unit III interim remedial action, and Feasibility Study Document Revision; and provide for the state grant, and comply with millsite remediation claims settlement (FY 2001/ID-GJ-104).
- Continue Operable Unit III interim remedial action and annual monitoring; provide for state grant (FY 2002/ID-GJ-104).

Grand Junction Office

- # Initiated active remedial action at two Uranium Mill Tailing Remedial Action groundwater sites on Navajo land (Tuba City, Arizona; Monument Valley, Arizona) (FY 2001/FY 2002/ID-GJ-105).
- # Make legally required Nuclear Regulatory Commission annual fee payment; initiate Phase I remedial action system at Shiprock, New Mexico; and maintain cooperative agreements including City of Life and Monument Valley alternative water supply (FY 2002/ID-GJ-105).
- # Completed the Uranium Leasing Program activities for 43 sites and provide for the contract termination (FY 2001/ID-GJ-106).
- # Provided for Bendix and RUST (previous site contractors) retiree medical insurance benefits. The DOE is obligated to pay for this medical insurance until retirees death (FY 2001/ID-GJ-106).
- # Provided for transition to a new contract including additional cost of contractor overlap (FY 2001/ID-GJ-106).
- # Provide plan for the Moab Utah Site for disposition of mill tailing pile and get plan reviewed by the National Academy of Science (FY 2002/ID-GJ-106).
- # Continue rent and utilities; continue Uranium Lease Management inspections; continue payment of RUST contract termination and retiree medical insurance contract liabilities; and continue contract transition activities (FY 2002/ID-GJ-106).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
ID-GJ-104 / Monticello Projects	9,067	685	787
ID-GJ-105 / UMTRA Groundwater	13,252	7,101	5,673
ID-GJ-106 / GJO All Other Projects	5,753	2,000	2,387
ID-OIM-110-N / Pre-FY 2007 Surplus Facility Deactivation Project - Non-Defense	0	3,726	2,838
ID-OIM-112-N / Pre-FY 2007 Idaho Engineering and Environmental Laboratory Surveillance and Maintenance - Non-Defense	1,440	1,328	1,500
Total, Idaho	29,512	14,840	13,185

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Grand Junction Office	14,820	2,685	3,174	489	18.2%
Idaho National Engineering and Environmental Laboratory	1,440	5,054	4,338	-716	-14.2%
UMTRA Groundwater	13,252	7,101	5,673	-1,428	-20.1%
Total, Idaho	29,512	14,840	13,185	-1,655	-11.2%

Metrics Summary

	FY 2001	FY 2002	FY 2003
Release Site			
Cleanup	0	4	2
Facilities Decommissioning			
Cleanup	3	0	0
Low-Level Waste			
Disposal (m^3)	22	0	0

Site Description

Grand Junction

The Grand Junction Office is located immediately south of the City of Grand Junction, Colorado, on a 57 acre adjacent to the Gunnison River. The Grand Junction Office supports environmental management activities in the areas of site characterization, project integration and coordination, remedial design, remedial action, independent verification, decontamination and dismantlement, and long-term surveillance and maintenance. Current Grand Junction Office project assignments include: the Monticello mill site and vicinity properties cleanup; the Grand Junction Office Remedial Action Project; the Long-Term Surveillance and Maintenance Program; the Uranium Leasing Program; the Grand Junction Office Waste Management and Landlord Programs; and the Uranium Mill Tailing Remedial Action Groundwater Project. The Grand Junction Office Program is comprised of 44 release sites and 44 facilities. The Uranium Mill Tailings Remedial Action Groundwater Project consists of 22 release sites, and cleanup of uranium mill tailings at the Moab, Utah Site.

Idaho National Engineering and Environmental Laboratory

The Idaho National Engineering and Environmental Laboratory, established as the National Reactor Testing Station in 1949, occupies 890 square miles in the Snake River Plain of Southeastern Idaho. Over the years, 52 reactors have been constructed and operated at the Idaho National Engineering and Environmental Laboratory. Three of these reactor facilities (Power Burst Facility, Advanced and Coupled Fast Reactivity Measurement Facility, and Materials Test Reactor) are managed by the Office of Environmental Management.

Monticello Projects

Environmental cleanup at and around Monticello, Utah, include remedial action on a 110-acre inactive Government-owned uranium/vanadium mill processing site and the adjacent private and DOE-owned peripheral properties; assessment and remediation of surface and groundwater contamination near Monticello; and remediation of more than 400 private properties (referred to as "Vicinity Properties"), which have been contaminated by mill tailings from the Monticello mill site.

The Monticello Projects are high visibility projects with the Environmental Protection Agency and the State of Utah. The Monticello Vicinity Properties Site and the Monticello Mill Tailings Site, both located in Monticello, Utah, are on the National Priorities List are being remediated in accordance with the Comprehensive Environmental Response, Compensation and Liability Act. A Federal Facility Agreement among DOE, the Environmental Protection Agency, and the State established DOE as the responsible party for remedial action and the Environmental Protection Agency as the lead agency for regulation of cleanup. The Environmental Protection Agency shares its decision-making authority with the State of Utah.

Uranium Mill Tailings Remedial Action Groundwater Project

The Uranium Mill Tailings Remedial Action Groundwater Project is carrying out additional characterization and compliance efforts not covered by the Uranium Mill Tailings Remedial Action Subsurface Project, at 22 designated uranium mill tailings sites. The project was initially authorized by Public Law 95-604. Each mill tailings site is a groundwater release site. Public Law 100-616 authorized groundwater compliance activities for an unlimited period of time. Where active remedial action is required, the Department will pay 90 percent of the costs; the States will pay ten percent. The Department is responsible for the entire cost of the remedial action for sites on Indian lands. Key activities initiated in FY 1999 were active groundwater compliance activities at the Tuba City and Monument Valley, Arizona, sites and completion of four release sites (Mexican Hat, Utah; two in Rifle, Colorado; and Grand Junction); completion of one alternate water supply at Monument Valley; initiation of a field investigation at Naturita, Colorado; and completion of a field investigation at Shiprock, New Mexico. Key activities in FY 2000 were the continuation of groundwater compliance activities at the Shiprock, New Mexico, site and continue groundwater compliance activities at the Tuba City and Monument Valley, Arizona, sites.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Idaho site is managed through an incentivized integrated management and operating contract, with fixed-price subcontracts. At Idaho, contract performance is driven and measured through the Performance Evaluation Management Plan process which updates, annually, the performance requirements by defining 5-year critical outcomes, 1 to 3-year performance objectives, and current year performance criteria. The percentage of incentivized measures is increased each year. The scope planned for FY 2003 provides for the Settlement Agreement with the State of Idaho and other compliance challenges associated with applicable requirements, while also maintaining the capability of the Idaho National Engineering and Environmental Laboratory to meet DOE mission objectives. Funds requested are appropriate to perform activities based on historical cost and engineering estimates.

ID-GJ-104 / Monticello Projects 9,067 685 787

This project provides remediation and restoration of the mill site, cleanup of vicinity and peripheral properties, and surface and groundwater cleanup. Monticello Mill Tailings Site activities involve: Removal of 2.54 million cubic yards of tailings and contaminated soil from mill site to on-site repository (Operable Unit I); Removal of 577,000 cubic yards of tailings contaminated soil from 300 acres, on 34 properties in Operable Unit II, and remediation of contaminated sediments along Montezuma Creek; Preparation of Remedial Investigation/Feasibility Study Interim Record of Decision, Proposed Plan and Record of Decision to determine remedy for cleanup of contaminated surface and groundwater under Operable Unit III. Vicinity properties activities will involve remediation of 424 properties in the Monticello and surrounding area. Remediation and restoration of properties comprising the Monticello Mill Tailings Site (Operable Units I-III) will result in their deletion from the National Priority List (Monticello Vicinity Properties were deleted in 2000).

- **#** Submit the draft Feasibility Study report.
- **#** Perform annual monitoring.
- **#** Continue interim remedial action.
- **#** Provide funding for the State of Utah grant.
- **#** Collect and analyze quarterly surface and groundwater samples.
- **#** Update the Remedial Investigation report.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Metrics			
Release Site			
Cleanups	0	3	0
Key Milestones			
# Operable Unit I - Complete restoration (July 2001).			
# Transfer of Monticello Comprehensive Environmental Response, Compensation and Liability Act site into the Long-Term Stewardship Program (September 2001).			
# Operable Unit I - draft Final Remedial Action Report for Millsite and surface water peripheral properties soil and sediment (January 2002).			
# Submit draft Final Feasibility Study (August 2003).			

ID-GJ-105 / UMTRA Groundwater 13,252 7,101 5,673

The scope of this project is to ensure protection of human health and the environment from groundwater contaminated by past uranium processing operations. Each of the 22 inactive uranium processing sites have been characterized to determine the necessary compliance strategy; no further remediation (11 sites), natural flushing (8 sites), or active remediation (3 sites). Regulatory approval is acquired for each site from the Nuclear Regulatory Commission, the strategy is implemented, and the site will be monitored for a sufficient period to ensure compliance. Baseline Risk Assessments and initial Site Observational Work Plans have been completed for most sites. Field investigations are progressing at sites requiring additional data on a priority basis.

- # Provide funding to the Nuclear Regulatory Commission (Uranium Mill Tailings Radiation Control Act regulator) for review and approval of the Uranium Mill Tailings Remedial Action-Groundwater documentation.
- # Provide funding for Cooperative Agreements.
- # Continue to operate and maintain the treatment plant and well field system at Tuba City, Arizona.
- # Complete construction of well fields and evaporation ponds, and initiate operation and maintenance of treatment systems at Shiprock, New Mexico.
- # Continue to operate and maintain the Monument Valley, Arizona Phase I remedial action.
- # Complete Environmental Assessment and Groundwater Compliance Action Plan at Green River, Utah.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Metrics			
Remedial Sites			
Cleanup	0	1	2
Key Milestones			
# Complete Site Observational Work Plan - Naturita, Colorado (September 2001).			
# Complete Site Observational Work Plan - Slick Rock, Colorado - two sites (September 2001).			
# Complete Site Observational Work Plan - Durango, Colorado (January 2002).			
# Start of Naturita remedial action compliance strategy implementation (September 2002).			
# Complete Groundwater Compliance Action Plan at Durango, Colorado (September 2002).			
# Complete Groundwater Compliance Action Plan at Slick Rock, Colorado - two sites (September 2002).			
# Start of Slick Rock, Colorado remedial action Compliance Strategy Implementation (September 2002).			
# Complete Groundwater Compliance Action Plan at Naturita, Colorado (September 2002).			
# Start Phase I remedial action at the Shiprock, New Mexico site (September 2002).			
# Start at Durango, Colorado remedial action Compliance Strategy Implementation (July 2003).			
# Complete Groundwater Compliance Action Plan at Green River (September 2003).			

ID-GJ-106 / Grand Junction Office All Other Projects 5,753 2,000 2,387

The Grand Junction Office All Other Projects provides for management/occupancy of the Grand Junction Office facility which includes lease costs and special lab maintenance costs; occupational medical support; Uranium Lease Management activities; Waste Management/Minimization activities; and liabilities associated with close out of the Rust Geotech contract. The PBS also included Grand Junction Office Remedial Action Plan activities which were completed in FY 2001.

- # Pay and administer lease with the site landlord, the Riverview Technology Corporation, a community-based Colorado nonprofit corporation.
- # Perform specialized maintenance of analytical lab equipment, calibrate radon measurement instruments, calibrate dosimeter equipment.
- # Fund the subcontract for site occupancy medical services.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

- # Make payment to Home Loan and Investment Co., the local insurance company covering Rust Geotech retiree medical costs.
- # Manage and dispose of low-level waste, mixed low-level waste, and hazardous waste, and recycle batteries, mercury, sanitary waste, and chemicals and minimize waste.
- # Manage leaseholder activities and administer royalty payments at uranium mining tracts in southwest Colorado.

Metrics			
Low-Level Waste			
Disposal (m^3)	22	0	0
Facility Decommissioning			
Cleanup	3	0	0

Key Milestones

- # Ship low-level waste, mixed low-level waste, and hazardous waste to commercial site (June 2001).
- # Complete transfer of the Grand Junction Office site real estate to non-DOE ownership (September 2001).
- # Demolish Building 7A (September 2001).
- # Demolish Building 62 Bag House (September 2001).
- # Pay and administer the 2002 lease with the site landlord (September 2002).
- # Complete contract transition from two current contracts to one single Technical Assistance contract (September 2002).
- # Pay and administer the 2003 lease with the site landlord (September 2003).

ID-OIM-110-N / Pre-FY 2007 Surplus Facility Deactivation Project - Non-Defense 0 3,726 2,838

This project provides for the removal of spent nuclear fuel from the Materials Test Reactor and Power Burst Facility. The project enables the subsequent deactivation of surplus facilities, which reduce cost and risk associated with surplus contaminated facilities.

- # Complete the transfer of Materials Test Reactor fuel to the Irradiated Fuel Storage Facility at Idaho Nuclear Technology and Engineering Center.
- # Complete preparations to load and transfer the Power Burst Facility fuel to the Irradiated Fuel Storage Facility at Idaho Nuclear Technology and Engineering Center.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Key Milestones

- # Complete fuel removal from Materials Test Reactor (December 2002).
- # Initiate wet-to-dry consolidation from the Material Test Reactor Canal (September 2002).

ID-OIM-112-N / Pre-FY 2007 Idaho Engineering and Environmental Laboratory Surveillance and Maintenance - Non-Defense 1,440 1,328 1,500

This project maintains the Power Burst Facility and storage basin and the Materials Test Reactor fuel storage canal in a safe, secure, and environmentally sound condition until deactivation is complete.

Continue surveillance and maintenance of the Power Burst Facility 620 (canal reactor building) and the Materials Test Reactor canal.

Total, Idaho 29,512 14,840 13,185

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
ID-GJ-104 / Monticello Projects	
# No significant change.	102
ID-GJ-105 / UMTRA Groundwater	
# Decrease reflects delays in implementing the land farming compliance strategy at Monument Valley and the Tuba City Phase II remediation system being postponed until Phase I is evaluated.	-1,428
ID-GJ-106 / GJO All Other Projects	
# No significant change.	387
ID-OIM-110-N / Pre-FY 2007 Surplus Facility Deactivation Project - Non-Defense	
# Decrease reflects change in focus from the Materials test Reactor fuel to the preparation and transfer of the Power Burst Facility fuel.	-888

	FY 2003 vs. FY 2002 ($000)
ID-OIM-112-N / Pre-FY 2007 Idaho Engineering and Environmental Laboratory Surveillance and Maintenance - Non-Defense	
# No significant change.	172
Total Funding Change, Idaho	-1,655

Oakland

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site/Project Completion account, managed through the Oakland Operations Office is to plan and implement remediation and waste treatment, storage, and disposal activities at six sites and associated activities at the Oakland Operations Office. These sites include the Lawrence Berkeley National Laboratory, the General Atomics facility, the Laboratory for Energy-Related Health Research, and the Stanford Linear Accelerator Center. The Non-Defense Environmental Management account also includes the administration of grants and program management and contracts in support of multiple sites at the Oakland Operations Office. Once the EM cleanup mission is completed, the Lawrence Berkeley National Laboratory and the Stanford Linear Accelerator Center will continue to have operating facilities under the Office of Science, while the other sites will be returned to the landowners.

Program Goal

One of the EM programmatic goals is to have cleanup completed at these four sites by FY 2006. Other programmatic goals include ensuring operations, facilities, and contaminated sites pose no undue risk to the public, worker health, and safety; to maintain compliance with applicable environmental laws; and managing risks associated with current and prior DOE operations at these sites.

Program Objectives

The program objective is to assess, remediate, decontaminate, and decommission contaminated sites and facilities; characterize, treat, minimize, store, and dispose of hazardous and radioactive waste; and develop, demonstrate, test and evaluate new cleanup technologies. These program activities are conducted taking an integrated approach to assessing work and meeting schedules, while balancing risk, mortgage reduction, compliance, cost efficiencies, stakeholder input, and implementation of enhanced performance mechanisms. All legacy waste will be characterized and shipped off-site. Long-term surveillance and maintenance of implemented remedial actions (e.g., pump and treat facilities) will be assumed by the landlord program or landowner, as the case may be at individual sites, after cleanup and waste disposal is complete.

Significant Accomplishments and Program Shifts

- Continued storage, treatment, and off-site disposal of waste (low-level and mixed low-level) at the Laboratory for Energy-Related Health (FY 2001).
- Completed workplans and begin removal action for the Western Dog Pen Areas and Domestic Septic Tank (Number 6) at the Laboratory for Energy-Related Health Research (FY 2001).
- Completed EM mission and begin surveillance and maintenance of irradiated fuel materials stored at General Atomics (FY 2001).
- Continued to reduce inventory of legacy waste at the Lawrence Berkeley National Laboratory and transfer responsibility for newly generated waste to the Office of Science (FY 2001).
- Completed Feasibility Study and pilot testing for the soil vapor extraction system at the Former Hazardous Waste Storage Area at the Stanford Linear Accelerator Center (FY 2001).
- Continue storage, treatment and off-site disposal of waste (low-level and mixed low-level) remediation wastes at the Laboratory for Energy-Related Health (FY 2002).
- Continue implementation of corrective measures at the Lawrence Berkeley National Laboratory in accordance with the Corrective Measures Study (FY 2002).
- Conduct several removal actions and perform waste disposal activities at the Laboratory for Energy-Related Health (FY 2002).
- Conduct assessment of remaining Domestic Septic Systems; complete the Domestic Tanks (3 and 6) Removal Action activities; and continue Western Dog Pen remedial action at the Lawrence Berkeley National Laboratory (FY 2002).
- Continue on-site surveillance and maintenance of the irradiated fuel materials at General Atomics (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
OK-003 / Lawrence Berkeley National Laboratory Soils and Groundwater (Environmental Restoration)	3,400	3,482	2,887
OK-005 / Stanford Linear Accelerator Center (Environmental Restoration)	2,289	2,604	3,034
OK-007 / ETEC Remediation	300	0	0
OK-010 / Laboratory for Energy-Related Health Research Environmental Restoration	3,860	3,630	1,979
OK-012 / Hot Cell Facility Decontamination and Decommissioning at General Atomics	1,067	298	200
OK-014 / Laboratory for Energy-Related Health Research Waste Management	1,983	2,234	2,819
OK-015 / Lawrence Berkeley National Laboratory Legacy Waste	630	1,443	859
OK-040 / Program Management and State Grants	1,167	90	50
Total, Oakland	14,696	13,781	11,828

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
General Atomics (CA)	1,067	298	200	-98	-32.9%
Energy Technology Engineering Center	300	0	0	0	0.0%
Lawrence Berkeley National Laboratory (CA)	4,030	4,925	3,746	-1,179	-23.9%
Oakland Operations Office (CA)	1,167	90	50	-40	-44.4%
Stanford Linear Accelerator Center (CA)	2,289	2,604	3,034	430	16.5%
U.C. Davis / Laboratory for Energy-Related Health Research (CA)	5,843	5,864	4,798	-1,066	-18.2%
Total, Oakland	14,696	13,781	11,828	-1,953	-14.2%

Metrics Summary

	FY 2001	FY 2002	FY 2003
Release Site			
Cleanups	8	16	11
Mixed Low-Level Waste			
Disposal (m^3)	1	1	11
Low Level Waste			
Disposal (m^3)	137	10	0

Site Description

Energy Technology Engineering Center

The Energy Technology Engineering Center is a DOE facility located on 90 acres of land leased from Boeing North America Corporation in Simi Valley, California. The environmental restoration activities at the Energy Technology Engineering Center are to remediate contaminated groundwater, complete decontamination and decommissioning of several remaining radiological facilities, deactivate and clean up existing sodium facilities, provide landlord functions, and perform waste characterization and off-site disposal.

General Atomics

The General Atomics site is privately-owned, operated, and located near San Diego, California. General Atomics has maintained and operated a Hot Cell Facility for over 30 years to conduct both government and commercially funded nuclear research and development. Department of Energy cleanup efforts are focused on cleanup of the Hot Cell Facility and surrounding contaminated soils. The General Atomics Hot Cell project is comprised of one facility and two release sites, all of which were completed in FY 2000. Cleanup activities will be finalized with the disposal of on-site contaminated soil in FY 2001. Shipment of the irradiated fuel materials to the Idaho National Engineering and Environmental Laboratory for interim storage remains to be completed at the General Atomics site. These funds would complete all Environmental Management work at the site. The current Idaho National Engineering and Environmental Laboratory schedule for acceptance of this fuel is FY 2003.

Lawrence Berkeley National Laboratory

The 200-acre Lawrence Berkeley National Laboratory site is located adjacent to the University of California in Berkeley, California. Remediation activities at the Laboratory focus on characterization and remediation of contaminated soil and groundwater. Currently, there are 163 release sites and one facility on-site, in the environmental restoration program. The waste management activities provide compliant storage, treatment, and off-site disposal of both legacy and currently generated hazardous and radioactive waste. The financial responsibility for the newly generated waste project was transferred to the generating DOE program (Office of Science) in FY 2001.

Oakland Operations Office

The Oakland Operations Office and the State of California have agreed to a statement of work for grant funds. Oakland Operations Office awards and manages grants provided to the state for oversight activities which include, participation in meetings, review of documents, and involvement with the public. In addition, grant related activities such as tribal college and universities, hispanic scholarships,

and independent reviews are managed and funded by the Oakland Operations Office. The operations office is responsible for the management and funding of contracts that provide the multiple sites with overall: program management support; waste management treatment and disposal; and technological support to accelerate program mission and cleanup.

Stanford Linear Accelerator Center

The Stanford Linear Accelerator Center site is a 426-acre site located near Stanford University in California. It is managed for DOE by Stanford University where theoretical research in high-energy particle physics is conducted. Remediation efforts focus on the cleanup of polychlorinated biphenyl contaminated soil sites and several solvent contaminated groundwater and soil sites. The Stanford Linear Accelerator Center site currently has 23 release sites. Responsibility for waste management activities was transferred to the Office of Science, the generating DOE program, in FY 1998.

Laboratory for Energy-Related Health Research

The Laboratory for Energy-Related Health Research site is located at the University of California, Davis. Research at the laboratory originally focused on the health effects from chronic exposure to radionuclides using animal subjects to simulate radiation effects on humans. The Department terminated the research program and closed the laboratory in 1988. Environmental restoration activities are directed toward cleaning up DOE areas of site contamination for release to the University of California, Davis. The Laboratory for Energy-Related Health Research site is comprised of 17 release sites and 8 facilities. The majority of waste characterization and off-site disposal and EM mission will be completed by FY 2004. However, there will be the need for participation in post closure review, as directed by the Comprehensive Environmental Response, Compensation, and Liability Act, that continues until FY 2006.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Lawrence Berkeley National Laboratory and the Stanford Linear Accelerator Center sites are managed through performance based management and operating contracts to assure the most cost-effective services to the government. The Laboratory for Energy-Related Health Research and Energy Technology Engineering Center sites are managed through cost and performance incentivized contracts. The project work at these sites have had an independent cost review of the scope (e.g. the Corps of Engineers and Oakland's in-house non-programmatic cost estimating staff have reviewed the Energy Technology Engineering Center scope and the Laboratory for Energy-Related Health Research scope and cost).

(dollars in thousands)

FY 2001	FY 2002	FY 2003

OK-003 / Lawrence Berkeley National Laboratory Soils and Groundwater (Environmental Restoration) 3,400 3,482 2,887

The mission of this project is to investigate and cleanup releases of hazardous and radioactive waste in soil and groundwater that may have occurred at the site. The Lawrence Berkeley National Laboratory has identified 164 release sites. The Lawrence Berkeley National Laboratory site is being investigated and remediated in conformance with the Resource Conservation and Recovery Act Guidance and Regulations, DOE Orders, and other applicable regulations. The Lawrence Berkeley National Laboratory has completed its Resource Conservation and Recovery Act Facility Investigation for designated Solid Waste Management Units and Areas of Concern to determine the amount and extent of contamination. The Lawrence Berkeley National Laboratory has initiated a Corrective Measures Study and is evaluating potential remediation technologies. If pilot testing is successful, results could be used to design and implement full-scale remediation systems.

Continue monitoring, maintenance, and operations of groundwater treatment systems and prepare regulatorily required quarterly reports.

Complete design of remedial systems proposed in the Corrective Measures Study finalized in FY 2002. (Full scale remedial systems may include soil heating, soil vapor extraction, ground water pump and treat systems, soil excavations, electro osmosis treatment systems, etc.)

Metrics			
Release Site			
Cleanup	0	8	8

Key Milestones

Complete risk assessment (June 2001).

Complete corrective measures studies (September 2002).

OK-005 / Stanford Linear Accelerator Center (Environmental Restoration) 2,289 2,604 3,034

The mission of this project is to clean up contaminated soils and groundwater using Comprehensive Environmental Response, Compensation and Liability Act technical guidance. The Stanford Linear Accelerator Center is an operating facility which is being operated by Stanford University under a contract with DOE to conduct theoretical research in high-energy particle physics. The Department is responsible for the long-term stewardship of the groundwater monitoring system(s) and maintenance and operation of any required hydraulic containment systems that will remain after the completion of the environmental restoration mission.

Submit remedial investigation/feasibility study report on the former hazardous waste storage area and plating shop to regulators.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

- Implement remedial actions at three of the volatile organic compounds contaminated groundwater sites, former solvent underground storage tank, former hazardous waste storage area, and Plating Shop. Although contamination removal will not be completed, the necessary systems (e.g., pump and treat) will be installed and tested so these sites will be ready to enter into stewardship.
- Implement remedial actions based on FY 2002 Preliminary Site Investigation at 17 on-site locations including former polychlorinated biphenyls transformer locations (e.g., Stanford Linear Collider, klystron gallery, Computer Building Substation, and 5.8 MegaWatt Power Supply), storage areas (e.g., Storage Area 16, Radioactive Materials Storage Yard, Storage Area East of master Substation, Bone Yard), industrial and general use areas (e.g., picnic grounds, clean landfill, End Station A, Building 007, Building 024, Beam Switch Yard {Surface Grade and Tunnel}, and Casting Pad).

Metrics			
Release Site			
Cleanup	3	1	6
Key Milestones			
# Submit to Regulators Final Report 1.0/1.5 MegaWatt Power Supply Removal (February 2001).			
# Complete Former Solvent Underground Storage Tank pilot test (July 2001).			
# Complete IR-6/8 risk assessment (August 2001).			
# Submit to regulators final report on Substation 505/Collider Injunction (September 2001).			
# Submit final plan substation 501 to regulators (November 2001).			
# Submit final plan substation 504 to regulators (November 2001).			
# Submit final plan substation 512 to regulators (February 2002).			
# Submit remedial investigation/feasibility study report plating shop to regulators (March 2003).			
# Submit remedial investigation/feasibility study report for the Former Hazardous Waste Storage Area to regulators (May 2003).			
# Submit to Regulators Final Report on Former Solvent Underground Storage Tank Remediation (February 2003).			
# Submit Interim Removal Action Plan, 5.8 MegaWatt Power Supply to regulators (May 2002).			
# Submit to regulators, the Test Laboratory/Central Laboratory Feasibility Study Report (July 2002).			

(dollars in thousands)

FY 2001	FY 2002	FY 2003

OK-007 / ETEC Remediation 300 0 0

The purpose of this project is to: 1) cleanup contaminated release sites; 2) decontaminate and decommission radioactive, and chemically contaminated facilities at the Energy Technology Engineering Center for eventual release to Boeing; and 3) perform Resource Conservation and Recovery Act cleanup involving the remediation of both contaminated groundwater and soil.

No activities planned in FY 2003.

OK-010 / Laboratory for Energy-Related Health Research
Environmental Restoration 3,860 3,630 1,979

This project includes: 1) decontamination and decommissioning of radioactive and chemically contaminated facilities; 2) removal of on-site radioactive sources; 3) remediation and/or removal of soil contamination at Southwest Trenches, radium and strontium treatment systems, domestic septic tanks, and outdoor dog pens (Western and Eastern Dog Pens) burial areas, leach fields; 4) closure or removal of underground tanks; 5) verification of cleanup completion; and 6) post closure monitoring as required by the Comprehensive Environmental Response, Compensation and Liability Act for National Priority List sites. The cleaned facilities and land will be returned to the University of California, Davis for future use.

Perform radiological survey of waste staging facility.

Provide financial support to the University of California, Davis (landlord) for the remediation of the eastern dog pens area as specified in the Memorandum of Agreement between DOE and the University of California, Davis.

Complete DOE Area Feasibility Study which is a Federal Facility Agreement enforceable milestone.

Metrics			
Release Site			
Cleanups	5	7	0
Key Milestones			
# Complete Sr leach field and piping system remedial action (September 2001).			
# Complete Western dog pens area remedial action (February 2003).			

OK-012 / Hot Cell Facility Decontamination and
Decommissioning at General Atomics 1,067 298 200

The mission of this project is to remove radiological and chemical contamination from the Hot Cell Facility leading to the regulatory release of the site to the landowner for future use.

Continue on-site surveillance and maintenance of the irradiated fuel materials.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Key Milestones
Dispose of the additional 50,000 Ft^3 of Project Generated Waste (August 2001).

OK-014 / Laboratory for Energy-Related Health Research

Waste Management	**1,983**	**2,234**	**2,819**

The mission of this project is to characterize, treat, transfer and/or dispose of remaining environmental restoration waste.

- # Continue characterization, designation, profiling, transportation, and disposal of all waste streams generated from the Western dog pens area and domestic tanks removal action.
- # Dispose of miscellaneous waste and materials currently stored onsite, including lead bricks and other decontamination and decommissioning waste stored at the Cobalt-60 field.
- # Provides for the disposal of non-hazardous waste and slightly contaminated equipment currently stored in the geriatric building.

Metrics			
Mixed Low-Level Waste			
Disposal (m^3)	1	1	11
Low-Level Waste			
Disposal (m^3)	110	0	0

Key Milestones
Complete disposal from dry wells and associated leach trenches (March 2001).
Complete disposal of low-level waste from the western dog pens and domestic septic tanks remedial action activities (September 2003).

OK-015 / Lawrence Berkeley National Laboratory Legacy

Waste	**630**	**1,443**	**859**

The mission of this project is to reduce inventories of previously generated low-level radioactive waste that has been generated by DOE programs at Lawrence Berkeley National Laboratory for which the Environmental Management program is responsible. Activities in this project support the treatment, storage, and disposition of legacy waste.

- # Provides for sampling of legacy waste as needed to certify and prepare for shipment.
- # Includes cost for certification of staff for oversight of legacy waste activities, and cost of waste shipments.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

- # Completes processing, storage and disposal of all (low-level, mixed low-level, and transuranic waste) legacy waste.
- # Completes waste management activities at site to meet scheduled completion date.

Metrics			
Low-Level Waste			
Disposal (m^3)	27	10	0
Key Milestones			
# Ship 30 m^3 of legacy waste (September 2001).			

OK-040 / Program Management/Grants 1,167 90 50

This project provides funding for the Oakland Operations Office to support and manage state grants and Oakland multiple site waste management and program support contracts.

- # Continue to process integrated program support and waste treat and disposal contracts.

Total, Oakland 14,696 13,781 11,828

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
OK-003 / Lawrence Berkeley National Laboratory Soils and Groundwater (Environmental Restoration)	
# Decrease in funding reflects revised schedule for implementation of full scale remediation systems.	-595
OK-005 / Stanford Linear Accelerator Center (Environmental Restoration)	
# Increase in funding results in the implementation of remedial actions.	430
OK-010 / Laboratory for Energy-Related Health Research Environmental Restoration	
# In FY 2003, the administration proposes to reduce this activity to permit Environmental Management to accelerate risk reduction elsewhere.	-1,651
OK-012 / Hot Cell Facility Decontamination and Decommissioning at General Atomics	

	FY 2003 vs. FY 2002 ($000)
# Decrease in funding reflects revised schedule for shipment of the irradiated fuel material to the Idaho National Engineering and Environmental Laboratory for interim storage.	-98
OK-014 / Laboratory for Energy-Related Health Research Waste Management	
# Increase in funding allows offsite disposal of some onsite waste generated from various removal action activities.	585
OK-015 / Lawrence Berkeley National Laboratory Legacy Waste	
# Decrease in funding is a result of less legacy waste being processed and disposed. . . .	-584
OK-040 / Program Management and State Grants	
# Decrease in funding reflects contractor support effort being reduced.	-40
Total Funding Change, Oakland	-1,953

Hanford Site - Richland Operations Office

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Site/Project Completion account, managed by the Richland Operations Office, is cleanout and surveillance and maintenance activities for buildings formerly used for DOE/Office of Nuclear Energy research and development.

Program Goal

The goal is to transition the former Office of Nuclear Energy facilities to safe, compliant, long-term, economic, interim condition pending ultimate disposition.

Program Objective

The objective is to perform cleanout and stabilization activities to put these facilities into a low-cost surveillance and maintenance condition as soon as possible.

Significant Accomplishments and Program Shifts

Activities included shipping a sodium filled cold trap to an off-site disposal facility, internal inspection of the Composite Reactor, and resumed deactivation activities. Placed the Plutonium Recycle Test Reactor (Building 309) in an appropriate condition for an interim surveillance and maintenance phase by securing the heating and ventilation system, shutdown the exhaust stack, cleanout of the fuel transfer pit, and completed roof repairs (FY 2001/FY 2002/RL-RC03).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
RL-RC03 / Advanced Reactors Transition	1,485	1,800	1,331
Total, Richland	1,485	1,800	1,331

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Hanford	1,485	1,800	1,331	-469	-26.1%
Total, Richland	1,485	1,800	1,331	-469	-26.1%

Metrics Summary

	FY 2001	FY 2002	FY 2003
The project in the Detailed Program Justification has associated metrics; however, no metrics are reportable in the 3-year budget profile.			

Site Description

Richland Operations Office--Hanford Site

The Richland Operations Office manages the Hanford site, which is located on 560 square miles (1,450 square kilometers) in southeastern Washington. Hanford was among the first facilities constructed by the Manhattan Project for the production of plutonium for national defense. Historically, the Hanford mission was plutonium production, reactor and processing operations, and research related to advanced reactors, energy technologies, and basic sciences. All production activities ceased in 1989, leaving a legacy of significant quantities of hazardous and nuclear waste.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

To support the site's missions, EM negotiated an extension of the current site operations contract through FY 2006 for transition work in the Central Plateau and the Spent Nuclear Fuel Project. The contract extension is performance based with 80 percent of the fee applied to the completion of specific cleanup activities and 20 percent of the fee applied to a comprehensive performance incentive. During the six-year performance period, the contractor is paid more fee for meeting multi-year performance objectives. Incremental progress and provisional fee payments will be provided to the contractor toward final completion of contract goals. A significant portion of the available fee is for stretch performance incentives, which requires the contractor to accelerate work by achieving cost and schedule efficiencies. For the restoration of the River Corridor, a closure contract is planned with attributes similar to the Rocky Flats and Fernald contracts.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
RL-RC03 / Advanced Reactor Transition	**1,485**	**1,800**	**1,331**

The Advanced Reactor Transition maintains and performs deactivation of the Nuclear Energy Legacy Facilities and the 309 Building/Plutonium Recycle Test Reactor. Deactivation activities reduces Hanford site mortgage associated with surplus facilities and contributes to economic transition The Plutonium Recycle Test Reactor 309, 335, 337, and 3718M Buildings activities include the surveillance and operation of these facilities according to all appropriate radiological orders. The deactivation/compliance activities prepare each building for long-term surveillance and maintenance pending decontamination and decommissioning.

- **#** Continue the nuclear energy legacy facilities deactivation activities; continue removal and disposal of small diameter piping, insulation and controls.
- **#** Initiate contract for cleaning large volume tanks.

Total, Richland	**1,485**	**1,800**	**1,331**

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
RL-RC03 / Advanced Reactors Transition	
# No significant change.	-469
Total Funding Change, Richland	-469

Post 2006 Completion

Program Mission

The Non-Defense Environmental Management, Post 2006 Completion account, includes projects that will require funding beyond 2006. Within the Non-Defense Environmental Management appropriation, this account includes projects at the Grand Junction Site in Colorado, the Los Alamos National Laboratory in New Mexico, the Energy Technology Engineering Center and General Electric sites in California, the West Valley Demonstration Project in New York, and the packaging certification program at Headquarters.

After completion of cleanup, it will be necessary for the EM program to maintain a presence at some sites to monitor, maintain, and provide information on the contained residual contamination. These activities will be necessary to ensure the reduction of risk to human health is maintained. Such stewardship will include passive or active controls, and often, treatment of groundwater over a long period of time. The extent of long-term stewardship required at a site will reflect the end-state developed in consultation among the U.S. Department of Energy, Congress, Tribal Nations, representatives of regulatory agencies and State and local authorities, representatives of non-governmental organizations, and interested members of the general public.

Program Strategic Performance Goals

Accelerating cleanup and project completion are central goals of the EM program. Environmental Management sites are working to reduce outyear costs by completing projects as soon and as efficiently as possible. For those sites in the Post 2006 Completion account, treatment will continue for the remaining "legacy" waste streams. The EM program will:

- Address the environmental risks across the Department of Energy complex and ensure that facilities and activities pose no undue risks to the public and worker safety and health.
- Continue surveillance and maintenance of facilities.
- Work aggressively with stakeholders and regulators to address the compliance challenges faced by the EM program.

One way EM is ensuring success is to manage the program based on sound performance measures that define and quantify programmatic strategic performance goals from the Departmental level down to the contractors performing the work. EM establishes specific performance measures and milestones on a project-by-project basis for the program within the context of the Environmental Quality Business Line and the Environmental Management Strategic Objectives. The EM program has been actively incorporating the requirements of the Government Performance and Results Act into its planning, budgeting, and management systems. At the programmatic level, these requirements are reflected in “corporate” performance measure and key milestone reporting and tracking. The EM management uses the corporate performance measures along with other site-specific and project-specific objectives on an annual basis to ensure that progress is being made toward the goal of site closure and project completion.

The chart below contains a summary of EM corporate performance measures for this program account. Detailed performance measure information can be found in the site details that follow this program overview.

Annual Performance Results and Targets [a] [b]

	FY 2001 Actuals	FY 2002 Estimate	FY 2003 Estimate
Non-Defense Post 2006 Completion			
Number of Release Site Cleanup	1	0	0
Number of High-Level Waste Canisters Produced	11	5	0
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	9	0
Volume of Mixed Low-Level Waste Treated (m^3)	4	60	0
Volume of Mixed Low-Level Waste Disposed (m^3)	4	7	0
Volume of Low-Level Waste Disposed (m^3)	1,484	425	0

Significant Accomplishments and Program Shifts

- The FY 2003 request reflects EM's project-oriented structure as a key component of the effort to accelerate cleanup and reduce costs. All EM activities are organized into projects which have a defined scope, schedule, cost, and end state. Specific accomplishments and program shifts may be found in the site details that follow this overview section.
- *Comparabilities*. The FY 2003 request has been prepared on a comparable basis. All activities and funds are displayed for FY 2001 and FY 2002 as if they were appropriated in the same appropriation and program account under which they are requested in FY 2003. The FY 2001 Appropriation and FY 2002 Appropriation have been adjusted to reflect the following comparabilities: movement of projects and/or activities between appropriations and/or program accounts; and shifts of projects and/or activities between sites.

[a] Life-cycle estimates for release sites, facilities, and high-level waste canisters include pre-1997 actuals. Waste type, nuclear materials, and spent nuclear fuel estimates are from fiscal years 1998 through 2070. In most instances, life-cycle refers to 1997-2070.

[b] This chart provides a consistent set of performance measures for the total EM program. The more detailed project-level justification provides a description of significant activities for each project including project-specific milestones, as applicable.

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Post-2006 Completion	137,107	125,753	0	125,753	112,887
Total, Non-Defense Post-2006 Completion	137,107	125,753	0	125,753	112,887

Public Law Authorization:

Public Law 95-91, “Department of Energy Organization Act (1977)”

Public Law 96-368, “West Valley Demonstration Project Act of 1980"

Public Law 100-616, “Uranium Mill Tailings Remedial Action Amendments Acts of 1988"

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

Public Law 106-377, “The Energy and Water Development Appropriations Act, 2001"

Public Law 107-66, “The Energy and Water Development Appropriations Act, 2002"

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque Operations Office	3,850	2,500	1,848	-652	-26.1%
Idaho Operations Office	7,002	7,415	6,299	-1,116	-15.1%
Multi-Site	3,544	8,659	1,000	-7,659	-88.5%
Oakland Operations Office	17,571	17,179	13,740	-3,439	-20.0%
Ohio Field Office	105,140	90,000	90,000	0	0.0%
Total, Non-Defense Post 2006 Completion	137,107	125,753	112,887	-12,866	-10.2%

Albuquerque

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Post 2006 Completion account, carried out by the Albuquerque Operations Office, is to support a portion of the activities at the Los Alamos National Laboratory in New Mexico; specifically, the recovery of radioactive sealed sources from the public and private sectors.

Program Goal

The Los Alamos National Laboratory has been designated as the lead laboratory for planning and operations for the recovery and disposition of unwanted radioactive sealed sources, from both the public and private sectors, which have no previous or current disposition options. In this capacity, the Los Alamos National Laboratory provides solutions to complex-wide technical and operational issues associated with stabilization and storage of plutonium and other nuclear materials.

Program Objectives

The objective of the Off-site Source Recovery Program is to establish compliance with the Low-Level Radioactive Waste Policy Amendments Act of 1985 (Public Law 99-240) with respect to unwanted radioactive sealed sources, which under the Act, are made a Department of Energy responsibility. A further objective of this program is to remove these unwanted radioactive sources from the private and public sectors as expeditiously as possible. This effort will reduce potential risk to the public health and safety, and the environment by the systematic recovery of these sources for acceptance at the Los Alamos National Laboratory, where they can be consolidated and safely stored until a final disposition path is identified.

Significant Accomplishments and Program Shifts

- Recovered from off-site and store approximately 3,900 individual sealed sources and consolidated into 135 waste storage containers awaiting disposition (FY 2001/FY 2002).
- Established procedures and approvals to recover excess and unwanted Pu-238/Am-241 sealed sources from off-site. Sources are accepted at the Los Alamos National Laboratory and packaged as transuranic waste for storage pending availability of disposal (FY 2001/FY 2002).
- Focus on recovering sources at up to 60 small sites around the United States and resolving security issues affecting Pu-239 sealed source storage at the Los Alamos National Laboratory (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
AL-032 / Off-site Source Recovery Program - Non-Defense	3,850	2,500	1,848
Total, Albuquerque	3,850	2,500	1,848

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Los Alamos National Laboratory	3,850	2,500	1,848	-652	-26.1%
Total, Albuquerque	3,850	2,500	1,848	-652	-26.1%

Metrics Summary

	FY 2001	FY 2002	FY 2003
The project in the Detailed Program Justification has associated metrics; however, no metrics are reportable in the 3-year budget profile.			

Site Description

Los Alamos National Laboratory

The Los Alamos National Laboratory encompasses over 43 square miles in northern New Mexico, and conducts major programs in multiple areas including: applied research in nuclear and conventional weapons in development, nuclear fission and fusion, nuclear safeguards and security, and environmental and energy research. The waste produced includes low-level, mixed, hazardous, transuranic, sanitary waste streams, and small amounts of other waste from research. The primary waste management activities include storage, treatment, and disposal of waste.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Los Alamos National Laboratory is managed through a performance-based management, and operating contract to assure the most cost-effective services to the Government. The scope planned for FY 2003 has been reviewed and is appropriate to meet the goals of the site as outlined in the EM sites' baseline planning data. The funds requested for FY 2003 are appropriate to perform the activities based upon an internal cost review of this project and a review of similar projects that have undergone independent reviews at this facility.

AL032/Off-site Source Recovery Program - Non-Defense . . 3,850 2,500 1,848

The purpose of this program is to establish compliance with Public Law 99-240 with respect to the Department of Energy's responsibility for acceptance and disposition of unwanted radioactive sealed source devices and material covered by Section 3(b)(1) Paragraph (D) of the Act. Establishment of this program fulfills the Department of Energy's obligation described in the "Recommendations for Management of Greater-than-Class-C Low-Level Radioactive Waste, Report to Congress in response to Public Law 99-240" (February 1987) (DOE/NE-0077) with respect to radioactive sealed sources. There are an estimated 18,000 sources within the scope of this project.

- Recover up to 900 sealed radioactive sources from licensees prioritized to reduce risk to public health and safety.
- Implement cost recovery where possible to increase the number of sources recovered.
- Support DOE planning activities to achieve disposal of Greater-Than-Class-C radioactive sealed sources.

Key Milestones
Recover 2,300 Sealed Sources (September 2001).
Completion of the Nuclear Regulatory Commission review of DOE's performance objectives for Greater-Than-Class-C low-level waste (September 2002).
Recover High Risk Sources from up to 60 small sites (September 2002).
Recover up to 900 radioactive sealed sources (September 2002).

Total, Albuquerque 3,850 2,500 1,848

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
AL-032 /Off-site Source Recovery Program - Non-Defense	
# No significant change.	-652
Total Funding Change, Albuquerque	-652

Idaho

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Post 2006 Completion account, carried out by the Idaho Operations Office, is to support the Long-Term Surveillance and Maintenance Program at the Grand Junction Office and cleanup of the Moab Site in Utah.

Program Goal

The Long-Term Surveillance and Maintenance Program at the Grand Junction Office is responsible for the long-term custody and care of ultimately more than 50 disposal sites and will continue indefinitely. The cleanup of the Moab Site in Utah will be accomplished after FY 2006.

Program Objectives

The objective of the Long-Term Surveillance and Maintenance Program provides long-term surveillance, environmental monitoring, maintenance, site security, and annual reporting. The Grand Junction Office will continue to manage the recently authorized Moab, Utah uranium mill tailings cleanup.

Significant Accomplishments and Program Shifts

- Program Shift: Transfer oversight of the Long-Term Surveillance and Maintenance Program at the Grand Junction Office from the Albuquerque Operations Office to the Idaho Operations Office (FY 2002).
- Provided for long-term surveillance, environmental monitoring, maintenance, site security, annual reporting, and emergency response for transferred Uranium Mill Tailings Remedial Control Act Title I and Title II, Nuclear Waste Policy Act Section 151 (c), and Decontamination and Decommissioning sites (FY 2001/ID-GJ-103).
- Continue annual surveillance and maintenance of the Uranium Mill Tailings Radiation Control Act Title I and Title II sites; the Nuclear Waste Policy Act Section 151 (c) site; and Decontamination and Decommissioning Program sites. Reimburse the Nuclear Regulatory Commission for their licensing and oversight activities for the Long-Term Surveillance and Maintenance program sites as required by law (FY 2002/ID-GJ-103).

- # Completed draft plan for remediation; received approval from the U.S. Fish and Wildlife to perform maintenance and characterization tasks at the Moab millsite; and completed draft health and safety plan for FY 2002 activities (FY 2001/ID-GJ-107).
- # Perform groundwater field activities for interim action; perform project management; and assess nature and extent of radiological contamination at site (FY 2002/ID-GJ-107).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
ID-GJ-103 / Long-Term Surveillance and Maintenance Program	5,052	5,415	5,333
ID-GJ-107 / Atlas Site	1,950	2,000	966
Total, Idaho	7,002	7,415	6,299

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Atlas	1,950	2,000	966	-1,034	-51.7%
Grand Junction	5,052	5,415	5,333	-82	-1.5%
Total, Idaho	7,002	7,415	6,299	-1,116	-15.1%

Metrics Summary

	FY 2001	FY 2002	FY 2003
The projects in the Detailed Program Justification has associated metrics; however, no metrics are reportable in the 3-year budget profile.			

Site Description

Grand Junction

The Grand Junction Office is located immediately south of the City of Grand Junction, Colorado, on a 57 acre site adjacent to the Gunnison River. The Grand Junction Office's primary mission is the closure of small sites and the long-term surveillance and maintenance of completed sites. Current Grand Junction Office project assignments include: the Monticello millsite and vicinity properties cleanup; the Grand Junction Office Remedial Action Project; the Long-Term Surveillance and Maintenance Program; the Uranium Leasing Program; the Grand Junction Office Waste Management and Landlord Programs; the Pinellas Environmental Restoration Program; the Maxey Flats Program; and the Uranium Mill Tailings Remedial Action Groundwater Project. The Grand Junction Office is responsible for 44 release

sites and 44 facilities, of which the Uranium Mill Tailings Remedial Action Groundwater Project consists of 22 release sites.

The Long-Term Surveillance and Maintenance Program conducts stewardship activities for 25 sites. For each site, the Long-Term Surveillance and Maintenance Program ensures that the on-site contaminated materials remain isolated from the environment, that the safety of the public and the environment is maintained, and that all applicable regulations are met. Program scientists, engineers, and specialists conduct inspections, provide maintenance, monitor performance, perform research, and archive records.

Moab

The Atlas Moab Site is a Title II site as currently authorized by the Uranium Mill Tailings Radiation Control Act, i.e., the licensee is currently responsible for cleanup of the site. In late 1998, the Atlas Corporation, the former licensee, declared bankruptcy. The Nuclear Regulatory Commission appointed a trustee, Pricewaterhouse Coopers, in December 1999. The site and most of the assets associated with the site have been transferred to the trustee, and currently the trustee has the responsibility for site cleanup. On January 14, 2000, the Secretary of Energy proposed that Congress provide authority for DOE to clean up the site under Title I of the Uranium Mill Tailings Radiation Control Act. In October 2000, the FY 2001 National Defense Authorization Act provided the necessary authority to DOE to cleanup the site.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003
ID-GJ-103/Long-Term Surveillance and Maintenance Program 5,052	**5,415**	**5,333**

This program is responsible for the long-term custody and care of transferred disposal sites from the Uranium Mill Tailings Radiation Control Act Surface program, other EM programs, and the private sector.

- # Provide funding to the Nuclear Regulatory Commission for review/approval of the Long-Term Surveillance and Maintenance documentation.
- # Continue inspection and maintenance at Title I Disposal Cells and Processing Sites and at Title II Disposal Cells, and fund the Corps of Engineers realty support.
- # De-water mill-tailings pile at Moab.
- # Continue inspection and maintenance at Monticello.
- # Operate and conduct the Long-Term Radon Management at the Grand Junction Disposal Cell.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

- # Continue inspection and maintenance at Nuclear Waste Policy Act Section 151(c) site and decontamination and decommissioning sites and administers actions, inspections, and maintenance at the 151(b) sites.
- # Continue inspection, maintenance, and monitor groundwater at Site A/Plot M at the Argonne National Laboratory.
- # Monitor performance of the Uranium Mill Tailings Remedial Action and other disposal cells.
- # Accept the Formerly Utilized Sites Remedial Action Program sites into long-term surveillance and maintenance.

Key Milestones
FY 2001 inspections, maintenance, and inspection reports for approximately 30 disposal sites (October 2001).
FY 2002 inspection, maintenance, and inspection reports for approximately 33 disposal sites (September 2002).
FY 2003 inspection, maintenance, and inspection reports for sites (September 2003).

ID-GJ-107 / Atlas Site 1,950 2,000 966

This project would remediate the Atlas tailings pile at Moab, Utah, consistent with the Uranium Mill Tailings Radiation Control Act standards to protect the Colorado River.

- # Complete groundwater field activities for interim action.
- # Conduct project management including community relations and environment, health and safety.
- # Conduct vicinity property radiological surveys and assess nature and extent of radiological contamination at site.

Key Milestones
Complete final plan for remediation of Moab Site to the National Academy of Science (September 2002).
Complete installation of groundwater interim remedial action (December 2002).

Total, Idaho 7,002 7,415 6,299

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
ID-GJ-013 / Long-Term Surveillance and Maintenance Program	
# No significant change.	-82
ID-GJ-107 / Atlas Site	
# Decrease in funding due to completion of groundwater field activities for interim action.	-1,034
Total Funding Change, Idaho	-1,116

Oakland

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Post 2006 Completion account, managed through the Oakland Operations Office is to plan and implement remediation and waste treatment, storage, and disposal activities at two sites. These sites include the Energy Technology Engineering Center and the General Electric Vallecitos Nuclear Center. These two sites will be returned to the landowners upon completion of cleanup work. The Non-Defense account also includes the management and administration of grants, program management, and management of contracts in support of multiple sites at the Oakland Operations Office.

Program Goal

Environmental Management's programmatic goals include: ensuring operations, facilities, and contaminated sites pose no undue risk to the public, worker health and safety; maintaining compliance with applicable environmental laws; and managing risks associated with current and prior DOE operations.

Program Objectives

The principle program objective is to assess, remediate, decontaminate, and decommission contaminated sites and facilities; characterize, treat, minimize, store, and dispose of hazardous and radioactive waste. These program activities are conducted taking an integrated approach to assessing work and meeting schedules, while balancing risk, mortgage reduction, compliance, cost efficiencies, stakeholder input, and implementation of enhanced performance mechanisms. Cleanup at the Energy Technology Engineering Center and General Electric will extend beyond FY 2006 and all legacy waste is currently scheduled to be shipped off-site once cleanup is complete. Long-term surveillance and maintenance of implemented remedial actions at the Energy Technology Engineering Center (e.g., pump and treat facilities) will be assumed by the land owners after cleanup and waste disposal is complete.

Significant Accomplishments and Program Shifts

- Completed interim removal action at the sodium disposal facility and removed sodium from small component test installation at the Energy Technology Engineering Center (FY 2001).
- Continued landlord activities (i.e., general and administrative support, rent) and sodium disposal at the Energy Technology Engineering Center (FY 2001).

- Completed implementation of DOE Order 435.1 and shipment of low-level and mixed low-level waste at the Energy Technology Engineering Center (FY 2001).
- Continue operations of groundwater extraction systems, operation of the Radioactive Material Handling Facility, development of corrective measures study, and treatment and disposal of waste at the Energy Technology Engineering Center (FY 2002).
- Negotiate a cost shared contract with General Electric (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
OK-007 / ETEC Remediation	9,361	8,700	6,172
OK-009 / ETEC Landlord	4,500	4,805	4,500
OK-013 / General Electric D&D (Environmental Restoration)	0	100	0
OK-040LT / Program Management and State Grants (Post 2006)	10	10	0
OK-041ND / Advance Waste Treatment and Environmental Technologies (Non-Defense)	500	64	0
OK-042 / ETEC Waste Management	3,200	3,500	3,068
Total, Oakland	17,571	17,179	13,740

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Energy Technology Engineering Center	17,061	17,005	13,740	-3,265	-19.2%
General Electric	0	100	0	-100	-100.0%
Oakland Operations Office	510	74	0	-74	-100.0%
Total, Oakland	17,571	17,179	13,740	-3,439	-20.0%

Metrics Summary

	FY 2001	FY 2002	FY 2003
Release Site			
Cleanup	1	0	0
Mixed Low-Level Waste			
Disposal (m^3)	4	7	0
Transuranic Waste			
Shipped to Waste Isolation Pilot Plant	0	9	0

Site Description

Energy Technology Engineering Center

The Energy Technology Engineering Center is a DOE facility located on 90 acres of land leased from Boeing North America Corporation in Simi Valley, California. The environmental restoration activities at the Energy Technology Engineering Center are to remediate contaminated groundwater, complete decontamination and decommissioning of several remaining radiological facilities, deactivate and clean up existing sodium facilities, provide landlord functions, and perform waste characterization and off-site disposal.

General Electric

The General Electric site is a privately-owned site located near Pleasanton, California. Activities are focused on cleanup of a High-Level Alpha Hot Cell and a glove box enclosure. In FY 2002, plans are to negotiate a cost-shared contract with General Electric. The General Electric site is comprised of two facilities. Once facility cleanup is completed it will be returned to the landowners for future use.

Oakland Operations Office

The Oakland Operations Office and the State of California have agreed to a statement of work for grant funds. The Oakland Operations Office awards and manages grants provided to the state for oversight activities which include, participation in meetings, review of documents, and involvement with the public. In addition, grant related activities such as tribal colleges and universities, Hispanic scholarships, and independent reviews are managed and funded by the Oakland Operations Office. The Oakland Operations Office is also responsible for the management and funding of contracts that provide the multiple sites with overall: program management support; waste management treatment and disposal; and technological support to accelerate program mission and completion.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The Energy Technology Engineering Center is managed through a cost and performance incentivized contract to assure the most cost-effective services to the Government. The project work at the Energy Technology Engineering Center has had an independent cost review of the scope (e.g. the Corps of Engineers and Oakland's in-house non-programmatic cost estimating staff).

OK-007 / Energy Technology Engineering Center

Remediation	**9,361**	**8,700**	**6,172**

The purpose of this project is to: 1) cleanup contaminated release sites; 2) decontaminate and decommission radioactive, and chemically contaminated facilities at the Energy Technology Engineering Center for eventual release to Boeing; and 3) perform Resource Conservation and Recovery Act cleanup involving the remediation of both contaminated groundwater and soil.

- **#** Continue to decontaminate and decommission the Sodium Pump Test Facility. (In order to maintain its status as an excluded recyclable material, DOE is required to recycle 75 percent of the surplus sodium annually).
- **#** Continue operations of the Space Nuclear Auxiliary Reactor, Building 4059 a Resource Conservation and Recovery Act permitted facility.
- **#** Support the off-site disposal of the transuranic waste.
- **#** Continue the Corrective Measures Study phase of the Remedial Field Investigation.

Metrics			
Release Sites			
Cleanup	1	0	0

Key Milestones	
#	Completion of interim removal action at the Former Sodium Disposal Facility (June 2001).
#	Septic tank removal (August 2001).
#	Environmental assessment (August 2001).

OK-009 / Energy Technology Engineering Center Landlord	**4,500**	**4,805**	**4,500**

This project supports all infrastructure management and surveillance and maintenance activities at the Energy Technology Engineering Center. Activities include landlord general support and surveillance and maintenance.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Continues infrastructure management and surveillance and maintenance, landlord general activities such as rent, environmental support, permits, security, and fire protection; and surveillance and maintenance efforts such as laboratory, facilities, records, and other support services.

OK-013 / General Electric Decontamination and Decommissioning (Environmental Restoration) 0 100 0

This project allows for the decontamination of Hot Cell #4 located in the Radioactive Materials Laboratory in Building 102 at the General Electric Vallecitos site near Pleasanton, California. The objective of the Alpha Cell #4 Decontamination Project is to remediate the cell for future use by General Electric.

No activities planned in FY 2003.

OK-040LT / Program Management and State Grants (Post 2006) 10 10 0

This project provides funding for the Oakland Operations Office to support and manage state grants and Oakland multiple site waste management and program support contracts.

No activities planned in FY 2003.

OK-041ND / Advanced Waste Treatment and Environmental Technologies (Non-Defense) 500 64 0

Activities performed under this project are to implement advanced technologies for both waste treatment and environmental restoration. Currently, the major activity involves the Lawrence Livermore National Laboratory, that developed Molten Salt Oxidation technology being commercialized by a waste treatment firm to treat DOE mixed low-level waste. Previously funded technologies as well as new technologies are always being evaluated for their potential and possible application and funding under this project.

No activities planned in FY 2003.

OK-042 / ETEC Waste Management 3,200 3,500 3,068

This project supports all necessary activities to manage and implement a waste management program for ongoing and planned environmental cleanup activities at the Energy Technology Engineering Center site. This project funds an existing facility that will provide centralized waste management of radioactive, and mixed waste generated from environmental cleanup activities and transportation of wastes for its final disposition.

Continue operation of the Radioactive Material Handling Facility.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Continue low-level waste disposition.

Continue mixed low-level waste disposal.

Metrics			
Transuranic Waste			
Shipped to Waste Isolation Pilot Plant	0	9	0
Mixed Low-Level Waste			
Disposal (m^3)	4	7	0
Key Milestones			
# Low-level waste disposal volume end of FY 2001 (September 2001).			

Total, Oakland	**17,571**	**17,179**	**13,740**

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
OK-007 / ETEC Remediation	
# Decrease in funding reflects the revised schedule for the decontamination and decommissioning of ancillary buildings associated with the Radioactive Materials Handling Facility and closure of that facility.	-2,528
OK-009 / ETEC Landlord	
# Decrease in funding reflects less records retention and configuration management activities.	-305
OK-013 / General Electric D&D (Environmental Restoration)	
# Decrease in funding reflects no activities planned in FY 2003.	-100
OK-040LT / Program Management and State Grants (Post 2006)	
# No significant change.	-10
OK-041ND / Accelerated Waste Treatment and Environmental Technologies (Non-Defense)	
# Decrease in funding reflects no activities planned in FY 2003.	-64

	FY 2003 vs. FY 2002 ($000)
OK-042 / ETEC Waste Management	
# Decrease in funding supports lesser quantities of low-level and mixed low-level waste being processed and disposed.	-432
Total Funding Change, Oakland	-3,439

Ohio

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Post 2006 Completion account, managed through the Ohio Field Office, is to support cleanup activities at the West Valley Demonstration Project in the State of New York.

Program Goal

The goal for the West Valley Demonstration Project, after completion of the vitrification/solidification of high-level waste tank heel material, is to decontaminate and decommission facilities used in carrying out the project, dispose of low-level and transuranic waste generated as a result of project activities, and ship high-level waste containers to a Federal repository.

Program Objectives

The West Valley Demonstration Project will be returned to New York State upon completion of the DOE's responsibilities in accordance with the West Valley Demonstration Project Act. This is dependent upon the availability of a Federal repository for final disposal of the high-level waste canisters, which will be stored and monitored in the interim.

In FY 2003, Ohio is completing the workscope under PBS OH-WV-01, High-Level Waste Vitrification and Tank Heel Activity Waste Processing. They are also transitioning the three remaining PBSs into four PBSs to ensure projects are directly related to distinct functional missions at West Valley. This is consistent with the workscope and associated baseline and it will facilitate budgeting and life-cycle planning for the project. There is no change in the overall scope of the life-cycle cost as a result of this proposed change. One of the new PBSs is not requesting any funding in FY 2003, and therefore is not included.

Significant Accomplishments and Program Shifts

West Valley Demonstration Project

- Deployed high-level waste tank washing and sampling equipment (FY 2001).
- Initiated high-level waste tank washing activities (FY 2001).
- Completed preliminary high-level waste tanks 8D-1 and 8D-2 radionuclide inventory (FY 2001).

- # Removed residual transuranic waste radioactivity from high-level waste tank 8D-2 (FY 2001).
- # Completed removal of process mechanical cell cranes and installed bridge mounted manipulator system (FY 2001).
- # Began mobilization for the Remote-Handled Waste Facility and continued construction of the Remote-Handled Waste Facility civil, structural, and building enclosure (FY 2001).
- # Completed Spent Nuclear Fuel Cask Loading operations into TN-Casks; loaded spent fuel shipping casts onto railcars; negotiated approved shipping routes and contracts; and trained emergency response personnel along shipping routes (FY 2001).
- # Complete the vitrification operations shutdown (FY 2002).
- # Complete high-level waste tank wash residual waste processing (FY 2002).
- # Establish final high-level waste tank 8D-2 radionuclide inventory (FY 2002).
- # Complete vitrification system flushing, evacuate and power down the melter (FY 2002).
- # Continue Head End Cell high activity waste/spent nuclear fuel debris removal efforts (FY 2002).
- # Perform low-level waste characterization and packaging activities for waste generated from facility decontamination activities (FY 2002).
- # Continue Remote-Handled Waste Facility construction (FY 2002).
- # Ship West Valley spent nuclear fuel to the Idaho National Engineering and Environmental Laboratory (FY 2002).
- # Initiate spent nuclear fuel storage rack removal, pool sludge cleanup, and pool deactivation activities (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
OH-WV-01 / HLW Vitrification and Tank Heel High Activity Waste Processing	47,330	24,400	0
OH-WV-02 / Site Transition, Decommissioning and Project Completion	47,810	58,800	0
OH-WV-03 / Spent Nuclear Fuel	10,000	6,800	3,600
OH-WV-05 / Decontamination of Project Facilities	0	0	24,600
OH-WV-06 / Waste Management	0	0	27,585
OH-WV-07 / Safe Site Operations	0	0	34,215
Total, Ohio	105,140	90,000	90,000

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
West Valley Demonstration Project	105,140	90,000	90,000	0	0.0%
Total, Ohio	105,140	90,000	90,000	0	0.0%

Metrics Summary

	FY 2001	FY 2002	FY 2003
High-Level Waste			
Canisters Produced	11	5	0
Mixed Low-Level Waste			
Treatment (m^3)	4	60	0
Low-Level Waste			
Disposal (m^3)	1,484	425	0

Site Description

West Valley Demonstration Project

The West Valley Demonstration Project is located at the Western New York Nuclear Service Center near West Valley, New York, 35 miles south of Buffalo. The Center was developed by a private company with government support to process commercial spent nuclear fuel to extract plutonium and uranium and operated from 1966 to 1972.

The West Valley Demonstration Project Act (Public Law 96-368) was enacted in 1980 and directed the Department of Energy to carry out a high-level waste solidification demonstration project, including: 1) preparation of the Western New York Nuclear Service Center's premises and facilities to accommodate the solidification project, including decontamination of existing facilities and equipment; 2) removal of the waste from underground storage tanks; 3) development, design, construction, and operation of systems and necessary supporting facilities for the solidification of waste; 4) acquisition of containers for permanent disposal of the solidified waste; 5) temporary storage of the solidified waste, followed by transportation to an appropriate Federal repository for permanent disposal; 6) decontamination and decommissioning of the waste tanks and facilities, material and hardware used in carrying out the solidification of the wastes; and 7) disposal of low-level and transuranic wastes produced from project activities.

The principal operation at West Valley thus far has been the solidification of approximately 2,200 m^3 of liquid high-level waste into borosilicate glass using vitrification. Prior to high-level waste solidification, a significant portion of the liquid high-level waste was pre-treated between 1988 and 1995. These pretreatment operations resulted in production of 20,000 drums of low-level waste, stabilized in cement, and reduced the amount of high-level waste inventory requiring the more costly vitrification treatment process. Vitrification operations for the remaining high-level waste began in 1996 and will be completed in FY 2002. Following final shutdown of the vitrification processing systems, the vitrification and tank farm facilities will be deactivated in preparation for decontamination and final dispositioning.

To continue progress toward fulfillment of the West Valley Demonstration Project Act mandates, and as vitrification treatment operations near completion, the Project is preparing for its next major phase which is decontamination and waste management. A Remote-Handled Waste Facility is under construction which will allow project personnel to safely remotely handle, size reduce, sort, characterize, and package the project's high activity waste in preparation for off-site shipment and disposal. The project is also transitioning its personnel from operations to decontamination and decommissioning and a number of projects are being executed across the site and within the old main plant facility in preparation for decontamination efforts to be supported after shutdown of vitrification operations.

Following site decontamination and waste management activities, the Project will pursue final dispositioning and site closure, which will be implemented consistent with an Environmental Impact Statement under development. The activities planned for the Project in the upcoming years are not dependent upon the final remediation decisions for the site currently being formulated between the DOE and New York State. The draft Environmental Impact Statement under development, which is being used as the basis for evaluating various closure options for the site, assumed a certain set of preconditions necessary before implementation of any of the site closure alternatives. The project continues to progress toward readiness for implementation of any of these final remediation activities.

The necessary decontamination and waste management activities to prepare the site for final decommissioning are expected to take several years to complete. The current life-cycle cost estimates and associated estimated completion dates for the project are based upon the DOE/Environmental Management's vision for site closure. Environmental Management feels confident that the current estimated life-cycle cost projected for the project will not be significantly modified once final remediation actions are determined. The scope that comprises Environmental Management's vision for site closure has been well received by the project's stakeholders to date.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

OH-WV-01 / High-Level Waste Vitrification and Tank Heel
High Activity Waste Processing 47,330 24,400 0

The West Valley Demonstration Project High-Level Waste Vitrification program has encompassed the design, construction, and operations associated with solidification of approximately 2,200 m^3 of liquid high-level waste and sludge. Liquid high-level waste and sludge vitrification operations was completed in FY 2001. In FY 2002, will focus on deactivating the vitrification processing operations and powering down the melter.

The Project Baseline Summary will be complete in FY 2002.

Key Milestones

Flush vitrification process systems and equipment, evacuate melter, and complete vitrification (March 2001).

Complete waste incidental to reprocessing determinations for the Waste Tank Farm (June 2001).

Obtain DOE approval to power down melter (August 2001).

Complete high-level waste tank heel/residuals vitrification processing (September 2001).

Complete high-level waste tanks 8D1 and 8D-2 Radionuclide Inventory (September 2001).

Remove residual transuranic waste radioactivity from high-level waste tank 8D-2 (September 2001).

OH-WV-02 / Site Transition, Decommissioning, and Project
Completion 47,810 58,800 0

The activities under this PBS included site monitoring and compliance, management of the radioactive groundwater plume, construction of the Remote Handled Waste Facility, Head End Cell equipment installation and decontamination to remove spent fuel debris, waste characterization and packaging efforts, on-site high-level waste canister storage, and low-level waste characterization, storage and shipping for off-site disposal. The West Valley Demonstration Project will continue to conduct safe storage of the vitrified the high-level waste canisters, head-end cell high activity waste/spent fuel debris, transuranic waste, mixed low-level waste and low-level waste until removal to an interim storage location or other final disposal actions are implemented.

The Project Baseline Summary will be complete in FY 2002; work scope transitions to PBS OH-WV-05, Decontamination of Project Facilities, PBS OH-WV-06, Waste Management, and PBS OH-WV-07, Safe Site Operations.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
Metrics			
High-Level Waste			
Canisters Produced	11	5	0
Low-Level Waste			
Disposal (m^3)	1,484	425	0
Mixed Low-Level Waste			
Treatment (m^3)	4	60	0
Key Milestones			
# Ship 50,000 cubic feet of Class A low-level waste off-site for disposal (May 2001).			
# Continue head-end cell (Process Mechanical Cell and General Purpose Cell) decontamination, spent fuel debris waste characterization and packaging (May 2001).			
# Begin mobilization for construction of the Remote-Handled Waste Facility (July 2001).			
# Continue construction of the Remote-Handled Waste Facility (September 2002).			
# Continue decontamination of former spent fuel reprocessing facility high risk areas (September 2002).			
# Continue efforts to mitigate the migration of contaminated groundwater plume (September 2002).			
# DOE-Headquarters Issue Record of Decision for decontamination and waste management (September 2002).			

OH-WV-03 / Spent Nuclear Fuel 10,000 6,800 3,600

The West Valley Demonstration Project manages 125 irradiated DOE-owned spent nuclear fuel assemblies that were to be removed from the West Valley Demonstration site per agreement with the State of Idaho and State of New York in FY 2001. The National Spent Nuclear Fuel Program schedule indicated that West Valley spent nuclear fuel were to be shipped to the Idaho National Engineering and Environmental Laboratory during the six month window opportunity between April and September of FY 2001, after which time the Fuel Receiving and Storage Area will be deactivated and decontaminated for possible Project reuse as a waste staging area. However, due to the moratorium on waste shipments, the plans are to ship in early FY 2002.

Continue the West Valley Demonstration Project commitments to support continuation of cleanup of the Spent Fuel Receiving and Storage Area including removal of water and decontamination of debris and equipment from the Fuel Receiving and Storage pool.

(dollars in thousands)

FY 2001	FY 2002	FY 2003

Key Milestones
Begin cleanup of Fuel Receiving and Storage Facilities (March 2001).
Complete the spent nuclear fuel cask loading operations into Transnuclear-Casks (September 2001).
Continue cleanup of the Fuel Receiving and Storage Area (September 2003).

OH-WV-05 / Decontamination of Project Facilities 0 0 24,600

This Project Baseline Summary supports scope per the West Valley Demonstration Project Act that required DOE to decontaminate the tanks and other facilities used in the high-level waste solidification process, and any material and hardware used in connection with the Project, according to criteria prescribed by the Nuclear Regulatory Commission. Also included are activities for Head End Cell equipment installation/upgrades to provide the capability to remotely collect and package loose spent fuel debris and other contaminated material, waste removal readiness reviews, head end cell spent fuel debris characterization and packaging efforts, and low-level waste characterization and packaging for disposal of waste generated by facility decontamination activities. Activities transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion in FY 2003.

- # Continue Head End Cell spent fuel debris waste collection, characterization, and packaging activities.
- # Post high-level waste processing clean-up activities.
- # Initiate facility characterization for the vitrification facility and the former spent fuel reprocessing facility.
- # Initiate low-level waste characterization and packaging of waste generated by facility decontamination activities.

Key Milestones
Continue Head End Cell (Process Mechanical Cell and General Purpose Cell) and spent nuclear fuel debris waste characterization and packaging (September 2003).

(dollars in thousands)

FY 2001	FY 2002	FY 2003

OH-WV-06 / Waste Management 0 0 27,585

This Project Baseline Summary supports scope per the West Valley Demonstration Project Act which requires DOE to disposition and transport solidified high-level waste to a Federal Repository for disposal, as well as low-level waste and transuranic waste produced by high-level waste solidification activities. It also includes activities required to disposition wastes generated by waste processing and decontamination of Project facilities. The Remote-Handled Waste Facility will provide the capability to characterize, size reduce, package for shipment and disposal remote-handled transuranic waste. Low-level waste disposal will be performed as required by applicable waste acceptance criteria using accepted standard practices. Activities transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion in FY 2003.

Continue construction of the Remote-Handled Waste Facility.

Key Milestones
Continue construction of the Remote-Handled Waste Facility (September 2003).

OH-WV-07 / Safe Site Operations 0 0 34,215

This Project Baseline Summary includes site monitoring and compliance and management of the radioactive groundwater plume and radioactive waste storage. It also includes site infrastructure and base safety and radiological protection programs. The technical requirements for final disposition of Project low-level waste facilities will be determined by decisions made through completion of the on-going National Environmental Protection Agency process for decontamination and waste management, and decommissioning and/or long-term stewardship. The West Valley Demonstration Project will continue to conduct safe storage of the vitrified high-level waste canisters, Head End Cell High Activity Waste spent fuel debris, transuranic waste, mixed low-level waste, and low-level waste until removal to an interim storage location or other final disposition actions are implemented. Activities transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion in FY 2003.

Maintenance of disposal-ready high-level waste canisters in safe interim storage.

Conduct safe storage of the Head End Cell High Activity Waste spent fuel debris, transuranic waste, mixed low-level waste, and low-level waste.

Continue efforts to mitigate the migration of the Sr-90 groundwater plume.

Support the on-going National Environmental Policy Act process.

Key Milestones
Continue safe maintenance and storage of low-level and transuranic waste (September 2003).

	(dollars in thousands)		
	FY 2001	FY 2002	FY 2003
Total, Ohio	**105,140**	**90,000**	**90,000**

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
OH-WV-01 / High Level Waste Vitrification and Tank Heel High Activity Waste Processing	
# Decrease in funding reflects project completion in FY 2002.	-24,000
OH-WV-02 / Site Transition, Decommissioning and Project Completion	
# Decrease in funding reflects work scope transitioned to new PBS's OH-WV-05, Decontamination of Project, OH-WV-06, Waste Management, and OH-WV-07, Safe Site Operations.	-58,800
OH-WV-03 / Spent Nuclear Fuel	
# Decrease in funding is due to result of shipping spent nuclear fuel to the Idaho National Engineering and Environmental Laboratory in FY 2002.	-3,200
OH-WV-05 / Decontamination of Project Facilities	
# Increase in funding reflects work scope transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion, beginning in FY 2003. This PBS was initiated to more discretely plan, budget, and execute scope associated with DOE's decontamination responsibilities as described in the West Valley Demonstration Project Act (Public Law 96-368, 1980).	24,600
OH-WV-06 / Waste Management	
# Increase in funding reflects work scope transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion, beginning in FY 2003. This PBS was initiated to more discretely plan, budget, and execute scope associated with DOE's waste management responsibilities as described in the West Valley Demonstration Project Act (Public Law 96-368, 1980).	27,585
OH-WV-07 / Safe Site Operations	
# Increase in funding reflects work scope transitioned from PBS OH-WV-02, Site Transition, Decommissioning, and Project Completion, beginning in FY 2003. This PBS was initiated to more discretely plan, budget, and execute scope associated with DOE's safe site and compliance responsibilities as described in the West Valley Demonstration Project Act (Public Law 96-368, 1980).	34,215

	FY 2003 vs. FY 2002 ($000)
Total Funding Change, Ohio	0

Multi-Site

Mission Supporting Goals and Objectives

Program Mission

The mission of the Non-Defense Environmental Management, Post 2006 Completion account, carried out by the Multi-Site activity is to support the Package Approval and Safety efforts. The Environmental Management program is being responsive to the General Accounting Office and others who have pushed for greater emphasis on national focus for the EM programs.

Program Goal

The overall goal of the Multi-Site activity is to better coordinate EM-wide and Department of Energy-wide program efforts and avoid overlaps and inconsistencies.

The mission of the Package Approval and Safety program is to support the protection of people and property from the potential consequences of normal and accident conditions of transport involving hazardous materials. The goals to support this mission are:

- Improve safety of packages used to transport hazardous materials through a program of design reviews and performance tests, and quality verification that satisfy internal operations and organizations external to the Department.
- Improve existing and develop new processes to maximize the efficiencies of these reviews and tests. Maintain an open and effective system of communication and coordination both internal and external to the Department.
- Ensure the package safety policies protect workers, the public, and the environment while providing program flexibility in accomplishing Departmental missions.
- Ensure that the Package Approval and Safety program is the Department's technical knowledge and analysis center for hazards classifications, design reviews, package training support and safety requirements.
- Ensure that package safety policies are coordinated with all affected customers and provide sufficient clarity of guidance to be correctly implemented.

Program Objectives

The Multi-Site activities focus' national attention on areas that support EM-wide goals and planned efforts. Many of these activities cut across the entire DOE complex and operations.

Significant Accomplishments and Program Shifts

Packaging Certification

- Approved more than 30 packages and conducted two audits (FY 2001).
- Continue efforts to reduce the backlog of safety reviews for packagings (FY 2001/FY 2002).
- Approve more than 30 applications and conduct two audits (FY 2002).
- Update the Package Review Guide (FY 2002).
- Support congressional and Departmental initiatives and correct deficiencies that surface during the year (FY 2002).

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
HQ-PC-001 / Packaging Certification	3,544	3,544	1,000
HQ-PM-ND / Policy and Management	0	5,115	0
Total, Multi-Site	3,544	8,659	1,000

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Multi-Site	3,544	8,659	1,000	-7,659	-88.5%
Total, Multi-Site	3,544	8,659	1,000	-7,659	-88.5%

Site Description

Within the Multi-Site budget, the Package Approval and Safety program activities provide for developing, coordinating, and implementing policies, standards, and guidance for aviation, maritime, rail, highway, pipeline, and hazardous materials safety for the Department. Under the authority provided by the United States Department of Transportation in 49 CFR, this program certifies Fissile and Type B packages for the transportation of radioactive materials for the Department. Evaluation and analysis of the Department of Energy line organizations' safety analysis reports for packaging are performed, in addition to providing external coordination between the Government and other governmental, commercial, and international bodies regarding packaging certification and transportation safety systems.

Detailed Program Justification

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
HQ-PC-001 / Packaging Certification	**3,544**	**3,544**	**1,000**

The Package Approval and Safety program supports the protection of people and property from the potential consequences of normal and accidental conditions of transport involving hazardous materials. This program addresses the need for robust packages that provide containment in the event of a transportation incident or accident and the concerns of internal and external stakeholders. Activities also include developing, coordinating, and implementing policies, standards, and guidance related to aviation, maritime, rail, highway, pipeline, and hazardous materials safety.

This program performs evaluations and analyses of safety analysis reports for packaging; tests packages; and provides external coordination between the Department and other governmental, commercial, and international bodies regarding transportation safety and packaging certification; participation in the development of transportation safety and packaging standards by national and international organizations; coordinating within the Department all matters pertaining to hazardous materials package certification and transportation safety; and overseeing field aviation, maritime, rail, highway, and pipeline safety implementation activities as they relate to the transportation of personnel and hazardous materials.

Exploring alternative methods for packaging certification in FY 2003.

HQ-PM-ND / Policy and Management	**0**	**5,115**	**0**

The activities funded by this Project Baseline Summary provided EM and others the technical support required for congressional and Departmental initiatives associated with the EM program that surfaced during the year. Funds to support these activities will be provided from operating funds available to each site.

No activity.

	(dollars in thousands)		
	FY 2001	FY 2002	FY 2003
Total Multi-Site	**3,544**	**8,659**	**1,000**

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
HQ-PC-001 / Packaging Certification	
# In FY 2003, the administration proposes to reduce this project to permit EM to accelerate risk reduction elsewhere.	-2,544
HQ-PM-ND / Policy and Management	
# Activities were completed in FY 2002.	-5,115
Total Funding Change, Multi-Site	-7,659

Excess Facilities

Program Mission

The mission of the Non-Defense Excess Facilities, carried out for the Department by the Environmental Management Program in collaboration with the transferring programs, is to manage the transfer for the final disposition of excess contaminated physical facilities leading to significant risk and cost reductions.

Program Strategic Performance Goals

The Department's overall goal of the Non-Defense Excess Facilities is to transfer excess contaminated facilities from across the Department's many programs for deactivation and decommissioning. Many of these facilities have existed far beyond their intended useful life and require expenditures of surveillance and maintenance funds to remain in a safe condition. Deactivation and decommissioning, when complete, will reduce or eliminate these expenditures.

In FY 2003, the Department will continue to fund the surveillance and maintenance of the excess facilities transferred in FY 2002 to EM from other programs for management and deactivation and decommissioning. These were the first transfers under DOE Order (435.1A) on Life-Cycle Asset Management, revised in October 1998. The Department anticipates that the transfer of additional excess facilities may continue to the EM program for disposition in future years. These transfers will set the stage for the cleanup of facilities no longer needed for mission work to begin in accordance with EM cleanup priorities. Additional funding is necessary to actually accomplish decommissioning of these facilities. The EM program will:

- Establish an efficient and effective, long-term approach for managing the transfer of excess facilities to EM.
- Maintain excess facilities in a safe and stable condition until deactivation and decommissioning activities can begin.

Significant Accomplishments and Program Shifts

FY 2003 New Facility Transfers

- The FY 2003 request reflects the transfer of one additional non-defense excess facility. The Tritium Systems Test Assembly Facility at Technical Area 21 at the Albuquerque/Los Alamos National Laboratory was built to develop and demonstrate the deuterium-tritium fuel cycle technology for next step fusion devises. The mission of the facility is no longer needed and therefore is being transferred to the Office of Environmental Management from the Office of Science. Funding to perform surveillance and maintenance activities to maintain the facility in a safe condition is also being transferred.

The FY 2003 request includes funds for surveillance and maintenance to enable EM to maintain the FY 2002 transferred facilities in a safe condition.

Funding Profile

(dollars in thousands)

	FY 2001 Comparable Appropriation	FY 2002 Original Appropriation	FY 2002 Adjustments	FY 2002 Comparable Appropriation	FY 2003 Request
Excess Facilities	0	3,500	0	3,500	1,841
Total, Non-Defense Excess Facilities	0	3,500	0	3,500	1,841

Public Law Authorization:

Public Law 107-66, “The Energy and Water Development Appropriations Act, 2002"

Funding by Site

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
Albuquerque / Los Alamos National Laboratory	0	0	460	460	>999.9%
Chicago / Brookhaven National Laboratory . . .	0	1,240	1,240	0	0.0%
Headquarters / Reserve	0	2,119	0	-2,119	<999.9%
Oak Ridge / Oak Ridge National Laboratory . .	0	141	141	0	0.0%
Total, Non-Defense Excess Facilities	0	3,500	1,841	-1,659	-47.4%

Funding Schedule

(dollars in thousands)

	FY 2001	FY 2002	FY 2003	$ Change	% Change
AL-EF-02 / Albuquerque Excess Facilities	0	0	460	460	>999.9%
CH-EF-01 / Chicago Excess Facilities	0	1,240	1,240	0	0.0%
HQ-EF- Non Defense	0	2,119	0	-2,119	<999.9%
OR-EF-02 / Oak Ridge Excess Facilities (Non-Defense)	0	141	141	0	0.0%
Total, Non-Defense Excess Facilities	0	3,500	1,841	-1,659	-47.4%

Site Descriptions

Albuquerque Operations Office/Los Alamos National Laboratory

The Tritium Systems Test Assembly Facility located at Technical Area 21 at Los Alamos National Laboratory was built to develop and demonstrate the deuterium-tritium fuel cycle technology for next

step fusion devices. Initial operation was in 1982 while operation with tritium began in 1984. The mission of the complex is no longer needed and therefore is being transferred from the Office of Science.

Chicago Operations Office/Brookhaven National Laboratory/High Flux Beam Reactor

The Brookhaven National Laboratory site is a multi-purpose research and development laboratory located on Long Island, New York. Brookhaven's facilities are used for both basic and applied research in high energy and nuclear physics.

Oak Ridge Operations Office/Oak Ridge National Laboratory

The Oak Ridge National Laboratory has historically supported the civilian energy research effort by conducting applied and basic research in energy technologies and in the physical and life sciences. Facilities included for transfer are the research services building and the hot storage garden building.

Detailed Program Justification

(dollars in thousands)

FY 2001	FY 2002	FY 2003

The scope planned for FY 2003 has been reviewed and is appropriate to meet the surveillance and maintenance goals of the Excess Facilities Transfer activities. The funds requested for FY 2003 are appropriate based on cost estimates and estimating models. Memorandum of Agreements for new facilities are currently in the negotiation process. Only one Memorandum of Agreement has been finalized at this time and the funding target transfer is shown below.

AL-EF-02 / Albuquerque Excess Facilities (Non-Defense) . . . **0** **0** **460**

This project is to perform surveillance and maintenance, deactivation and decommissioning of the Tritium Systems Test Assembly, Technical Area 21, at Los Alamos National Laboratory.

Surveillance and maintenance activities to maintain the facility in a safe condition.

CH-EF-01 / Chicago Excess Facilities **0** **1,240** **1,240**

This project stabilizes, characterizes, deactivates, and decommissions the High Flux Beam Reactor (building 0750), a research reactor at Brookhaven National Laboratory.

Surveillance and maintenance activities to maintain the facility in a safe condition will continue in FY 2003.

(dollars in thousands)

	FY 2001	FY 2002	FY 2003
HQ-EF / Non-Defense	**0**	**2,119**	**0**

Congress appropriated additional FY 2002 funding to begin actual deactivation and decommissioning. These funds are being held in reserve until a determination is made by EM to decide how to best distribute these funds to the field. No additional funds are being requested in FY 2003.

OR-EF-02 / Oak Ridge Excess Facilities (Non-Defense)	**0**	**141**	**141**

This project performs surveillance and maintenance, deactivation and decommissioning assessments on the Research Services (Building 9735) and Hot Storage Garden (Building 3597).

Surveillance and maintenance activities to maintain the facilities in a safe condition will continue in FY 2003.

Total, Non-Defense Excess Facilities	0	3,500	1,841

Explanation of Funding Changes

	FY 2003 vs. FY 2002 ($000)
AL-EF-02 / Albuquerque Excess Facilities (Non-Defense)	
# FY 2003 Memorandum of Understanding transferring the Tritium Systems Test Assembly Facility from the Office of Science to EM.	460
CH-EF-01 / Chicago Excess Facilities	
# No change	0
HQ-EF / Non-Defense	
# In FY 2003, the administration proposes to eliminate additional funds for excess facilities to permit Environmental Management to accelerate risk reduction elsewhere.	-2,119
OR-EF-02 / Oak Ridge Excess Facilities	
# No change.	0
Total Funding Change, Non-Defense Excess Facilities	-1,659