Defense Facilities Closure Projects

Proposed Appropriation Language

For expenses of the Department of Energy to accelerate the closure of defense environmental management sites, including the purchase, construction and acquisition of plant and capital equipment and other necessary expenses, [\$1,082,714,000] \$1,050,538,000, to remain available until expended. (*Energy and Water Development Appropriations Act, 2001, as enacted by Section 1(a)(2) of Public Law 106-377.*)

Explanation of Change

None

Defense Facilities Closure Projects

Program Mission

The Defense Facilities Closure Projects appropriation includes two program accounts, Site Closure and Safeguards and Security. The Environmental Management (EM) program has established a goal to complete its DOE cleanup mission by 2006 for those sites funded under this Appropriation. The FY 2002 request for the Defense Facilities Closure Projects appropriation is \$1,050,538,000, a decrease of \$29,793,000 from a comparable FY 2001 Appropriation of \$1,080,331,000.

Program Goal

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 workers and the public, and reduce the financial burden on the taxpayer. The FY 2002 budget request for the Defense Facilities Closure Projects appropriation reflects the program's emphasis on site closure and project completion.

Program Objectives

- # Accelerate cleanup efforts at sites and realize substantial savings by the resulting reduction in long-term program costs and ongoing support costs.
- # Where possible, once the cleanup mission has been accomplished, make sites available to communities for other uses.
- # Work aggressively with stakeholders and regulators to address the compliance challenges faced by the EM program.

Performance Measures

One way EM is ensuring success is to establish and manage based on sound performance measures. 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 EM's 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.

EM Corporate Performance Measures ^{a b}

	FY 2000 Actuals	FY 2001 Estimate	FY 2002 Estimate	Life-cycle
Defense Facilities Closure Projects - Site Closure				
Number of Release Site Completions	5	0	0	539
Number of Facilities Decommissioned	8	10	3	925
Number of Facilities Deactivated	4	5	2	141
Volume of Transuranic Waste Shipped to WIPP for Disposal				
(m ³)	249	1,000	2,824	16,523
Volume of Mixed Low-Level Waste Treated (m ³)	606	230	443	11,881
Volume of Mixed Low-Level Waste Disposed (m ³)	787	160	551	17,003
Volume of Low-Level Waste Disposed (m ³)	0	1,729	0	7,800
Nuclear Material Stabilized - Pu Residue (kg bulk)	29,286	29,015	5,093	109,741

Significant Accomplishments and Program Shifts

Safeguards and Security: The Environmental Management budget request for FY 2002 includes a request for safeguards and security funding under a separate program account, consistent with FY 2001 appropriation. Security investigations are requested under the Office of Security and Emergency Operations budget.

^a Life-cvcle 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 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Defense Facilities Closure Projects			· ·		
Site Closure	1,001,524	1,027,942	-2,262	1,025,680	1,004,636
Safeguards and Security	60,653	54,772	-121	54,651	45,902
Total, Defense Facilities Closure Projects	1,062,177	1,082,714	-2,383	1,080,331	1,050,538

Public Law Authorizations:

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 106-398, "The National Defense Authorization Act for Fiscal Year 2001"

Funding by Site

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Ohio Field Office					
Ashtabula	15,346	16,212	9,721	-6,491	-40.0%
Fernald	271,441	283,452	285,299	1,847	0.7%
Miamisburg	88,921	90,544	70,939	-19,605	-21.7%
Columbus	8,808	16,098	10,100	-5,998	-37.3%
Total, Ohio	384,516	406,306	376,059	-30,247	-7.4%
Rocky Flats Field Office	617,008	619,374	628,577	9,203	1.5%
Safeguards and Security	60,653	54,651	45,902	-8,749	-16.0%
Total, Defense Facilities Closure Projects	1,062,177	1,080,331	1,050,538	-29,793	-2.8%

Site Closure

Program Mission

The Defense Facilities Closure Projects, Site Closure account supports sites where the Environmental Management (EM) program has established a goal to complete its DOE cleanup mission by the end of FY 2006. This account includes funding for projects under the Ohio Field Office in Ohio (i.e., Fernald, Miamisburg, Ashtabula, and Columbus projects), and the Rocky Flats Environmental Technology Site in Colorado.

Program Goal

Accelerating cleanup and project completion are central goals of the EM program. EM sites are working to reduce out year costs by safely completing projects as soon and as efficiently as possible. For those sites in the Site Closure account, the goal of the EM program is to complete the cleanup mission by 2006, after which no further Departmental mission is envisioned, except for limited long-term surveillance and maintenance. These sites may be available for some alternative use.

Program Objectives

- # Accelerate cleanup efforts at sites and realize substantial savings by the resulting reduction in long-term program costs and ongoing support costs.
- # Sequence work at the Ohio sites to focus activities on those sites where the most cost savings can be obtained through acceleration, while utilizing the remaining funding to focus on sequencing the completion of the remaining sites.
- # Where possible, once the cleanup mission has been accomplished, make sites available to communities for other uses.
- # Work aggressively with stakeholders and regulators to address the compliance challenges faced by the EM program.

Performance Measures

One way EM is ensuring success is to establish and manage based on sound performance measures. 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 EM's 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.

	FY 2000 Actuals	FY 2001 Estimate	FY 2002 Estimate	Life-cycle
Defense Facilities Closure Projects - Site Closure				
Number of Release Site Completions	5	0	0	539
Number of Facilities Decommissioned	8	10	3	925
Number of Facilities Deactivated	4	5	2	141
Volume of Transuranic Waste Shipped to WIPP for Disposal				
(m ³)	249	1,000	2,824	16,523
Volume of Mixed Low-Level Waste Treated (m ³)	606	230	443	11,881
Volume of Mixed Low-Level Waste Disposed (m ³)	787	160	551	17,003
Volume of Low-Level Waste Disposed (m ³)	0	1,729	0	7,800
Nuclear Material Stabilized - Pu Residue (kg bulk)	29,286	29,015	5,093	109,741

EM Corporate Performance Measures ^{a b}

Significant Accomplishments and Program Shifts

The FY 2002 request reflects the project-oriented structure that EM has developed as a key component to safely accelerate cleanup and reduce costs. All EM activities are organized into projects which have a defined scope, schedule, cost, and end state. EM sites are working to sequence projects and track progress, thereby reducing life-cycle costs and schedules. Specific accomplishments and program shifts may be found in the site details that follow this program overview.

^a Life-cvcle 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 2000 Comparable Appropriation	FY 2001 Original Appropriation	FY 2001 Adjustments	FY 2001 Comparable Appropriation	FY 2002 Request
Site Closure, Defense	1,001,524	1,027,942	-2,262	1,025,680	1,004,636
Total, Defense Facilities Closure Projects, Site Closure	1,001,524	1,027,942	-2,262	1,025,680	1,004,636

Public Law Authorizations:

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 106-398, "The National Defense Authorization Act for Fiscal Year 2001"

Funding by Site

	(dollars in thousands)				
	FY 2000 FY 2001 FY 2002 S		\$ Change	% Change	
Ohio Field Office	384,516	406,306	376,059	-30,247	-7.4%
Rocky Flats Field Office	617,008	619,374	628,577	9,203	1.5%
Total, Defense Site Closure	1,001,524	1,025,680	1,004,636	-21,044	-2.1%

Ohio

Mission Supporting Goals and Objectives

Program Mission

The mission of the Defense Facilities Closure Projects, Site Closure account, managed through the Ohio Field Office is to support cleanup activities at four sites in the State of Ohio. These sites are: the Fernald Environmental Management Project; the Miamisburg Environmental Management Project; the Columbus Environmental Management Project; and the Ashtabula Environmental Management Project sites. The Ohio Field Office manages, coordinates, tracks, and assists in the implementation of the cleanup program among the various sites.

Program Goal

The goal of the Ohio Field Office sites is the transfer of real property to the state or local communities or to the private owners by completing environmental restoration and waste management projects with a minimal but adequate level of long-term stewardship continuing after project closure.

Program Objectives

The objectives for the Ohio sites will be to continue safe shutdown; decontaminate and decommission buildings; disposition contaminated soil, debris and waste material to an off-site disposal cell or on-site, if appropriate; and accelerate groundwater cleanup through innovative technology deployment. This initiative depends on a variety of factors, including community needs, regulatory requirements, and technical feasibility. The Ashtabula Environmental Management Project site will be released for unrestricted use and returned to Earthline Technologies (formerly RMI Titanium Company); the Columbus Environmental Management Project site will be transferred to Battelle Laboratories to use without radiological restrictions; the Fernald Environmental Management Project site will be completed and placed under institutional control; and the Miamisburg Environmental Management Project site will be transferred to the City of Miamisburg for industrial use.

In achieving our highest-priority goals, the Ohio sites will seek to apply innovative science and technology solutions that facilitate cleanup goals safer, less expensively, and faster. For instance, at Columbus, an innovative in situ alternative to "dig and haul" (well injection depth extraction combined with *Emplore* cesium removal technology) will be used to remediate an abandoned filter bed at an estimated potential savings of at least \$2.6 million. And at Fernald, where new in situ analysis tools (Integrated Excavation Control System/Excavation Monitoring System) will enable real-time radiological measurements in hazardous areas during excavation, thereby eliminating the expense of unnecessary excavation and saving an estimated \$5.4

million. Also, a suite of new remotely operated post-closure monitoring technologies are replacing manual performance monitoring of Cell 1 of Fernald's On Site Disposal Facility. At Miamisburg, new long-term stewardship technologies are being selected to monitor above-ground structures.

Significant Accomplishments and Program Shifts

Ashtabula Environmental Management Project

- # Completed Phase I soil treatment campaign (18,000 tons of soil) (FY 2000).
- # Completed decommissioning of two facilities, and completed the deactivation of one facility (FY 2000).
- # Transported and disposed of 672 m³ low-level waste and remediation waste (FY 2000).
- # Decommission and demolish three facilities, process contaminated debris and dispose of waste (FY 2001).
- # Ship 130 m³ low-level waste to DOE disposal sites; ship 800 m³ of remediation waste to a commercial disposal facility (FY 2001).
- # Complete Corrective Action Management Unit facility soil design (FY 2001).
- # Initiate Corrective Action Management Unit soil facility construction (FY 2001).
- # Continue construction of the waste processing facility (FY 2001/FY 2002).
- # Two facilities will be deactivated (FY 2002).

Columbus Environmental Management Project

- # Continued transuranic waste processing; pressure washing, chemical bath processing and careful sorting/segregation (FY 2000).
- # Continued interior decontamination, including material and equipment removal; continued removal of material/equipment from the hot cells (FY 2000).
- # Continued shipments of remediation and low-level waste (2,756 m³ in FY 2000).
- # Initiated the decontamination of two buildings at West Jefferson Site, including transuranic waste processing and associated equipment removal; and remediated soils from external areas at the site (FY 2000).
- # Initiate remote handled transuranic waste shipments to an off-site interim storage location (FY 2001).
- # Initiate Building JN-1 high bay decontamination (FY 2001).
- # Remediate Old Filter Beds (FY 2001).
- # Continue remote-handled transuranic waste shipments to an off-site interim storage location. (FY 2002).

Fernald Environmental Management Project

- # Continued Waste Water Treatment Operation; completed first year operation of the groundwater re-injection and pre-designed monitoring in the waste pits and Plant 6 areas and processed two billion gallons of waste water (FY 2000).
- # Began dryer operations and continued processing, shipping, and disposal of remediated Pit Waste (FY 2000).
- # Continued safe shutdown of non-nuclear facilities (FY 2000); and continued to treat and dispose of safe shutdown residues (FY 2000).
- # Completed excavation of stockpiles SP-2/3; and continued advanced waste water treatment operations (FY 2000).
- # Continued Cell 1 and 2 waste placement and initiated waste placement in Cell 3 (FY 2000).
- # Completed decontamination and decommissioning of Maintenance Building/Tank Farm Complex; and awarded contract for decontamination and decommissioning of Plant 6 complex (FY 2000).
- # Began pre-operational activities for Silo 3 remediation (FY 2000).
- # Continue safe shutdown of non-nuclear facilities (FY 2001).
- # Complete decontamination and decommissioning of Plant 5 Complex and continue decontamination and decommissioning of Plant 6 Complex (FY 2001).
- # Place permanent cap on Cell 1 (FY 2001).
- # Continue extraction/injection and wastewater treatment operations and maintenance (FY 2001).
- # Continue waste drying operations, and process, ship and dispose of pit waste (FY 2001).
- # Submit draft Record of Decision Amendment for Silos 1 and 2 to the Environmental Protection Agency (regulatory milestone) for review, comment/approval (FY 2001).
- # Conduct Silo 1 and 2 mockup testing of Accelerated Waste Retrieval System using Silo 4 (FY 2001).
- # Continue warehousing, surveillance, handling and packaging and dispositioning of depleted, normal, enriched uranium material and related waste (FY 2001).
- # Continue shipments of nuclear materials to the Oak Ridge Operations Office (FY 2001).
- # Characterize all legacy mixed wastes and continue storage of mixed wastes awaiting characterization, treatment, or disposition (FY 2001).
- # Awarded completion contract with significant incentives to the contractor to complete the site prior to the December, 2010 target date (FY 2001).
- # Complete all nuclear materials shipments (FY 2002).

Miamisburg Environmental Management Project

- **#** Completed disposition of all remaining legacy nuclear materials and Resource Conservation and Recovery Act regulated chemicals (FY 2000).
- # Transfer two parcels of real property to the City of Miamisburg (FY 2001).
- # Completed deactivation of three buildings (FY 2000) and complete four buildings (FY 2001).
- # Commence off-site disposition of transuranic waste (FY 2001).
- # Completed assessments of four buildings (FY 2000) and complete assessments on four additional buildings (FY 2001).
- # Completed decommissioning and decontamination of four buildings (FY 2000) and will complete three buildings (FY 2001).
- # Completed four assessments and five cleanups of soil release sites (FY 2000) and complete six assessments of soil release sites (FY 2001).
- # Continued deactivation and decontamination of Mound tritium complex the "critical path" in (FY 2000) and will continue this activity in FY 2001.
- # Continue critical path activities to support deactivation and decontamination of Mound tritium complex; continue off-site disposition of transuranic waste; continue off-site disposition of remediation-generated low-level waste; complete nine soil release site assessments (FY 2002).

Funding Schedule

_	(dollars in thousands)		
	FY2000	FY 2001	FY 2002
OH-AB-01 / Remediation	10,815	10,796	5,000
OH-AB-02 / Project Management, Site Services, Environmental, Safety			
and Health	4,531	5,416	4,721
OH-CL-02-D / West Jefferson Site Decontamination (Defense)	5,953	12,298	6,300
OH-CL-03-D / Project Management, Site Support and Maintenance	2,855	3,800	3,800
OH-FN-01 / Facility and Project Support	28,957	29,587	23,437
OH-FN-02 / Facility Decontamination and Dismantlement	13,898	16,877	34,347
OH-FN-03 / On-Site Disposal Facility	13,548	15,660	3,188
OH-FN-04 / Aquifer Restoration	19,957	26,668	20,498
OH-FN-05 / Waste Pits Remediation Project	50,034	47,760	56,861
OH-FN-06 / Soils	14,331	8,609	3,829
OH-FN-07 / Silos	33,668	23,051	40,538
OH-FN-08 / Nuclear Materials	7,587	13,063	748
OH-FN-10 / Mixed Waste	3,998	2,023	5,282
OH-FN-11 / Waste Management	18,442	25,094	26,922
OH-FN-12 / Program Support and Oversight	67,021	75,060	69,649
OH-MB-02 / Main Hill Tritium	29,115	32,042	23,076
OH-MB-03 / Waste Activities	13,196	14,397	13,213
OH-MB-04 / Main Hill Rad	2,489	704	0
OH-MB-05 / Main Hill Non Rad	3,287	2,111	0
OH-MB-06 / Special Metals/Plutonium Processing Hill	4,335	1,977	2,000
OH-MB-07 / Test Fire Valley	6,097	5,147	3,000
OH-MB-08 / Soils	8,545	4,313	1,000
OH-MB-09 / Facility Operations and Maintenance	20,269	26,399	25,000
OH-MB-10 / Regulatory Oversight and Site Support	1,588	3,454	3,650
Total, Ohio	384,516	406,306	376,059

Funding by Site

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Ashtabula Environmental Management Project	15,346	16,212	9,721	-6,491	-40.0%
Columbus Environmental Management Project	8,808	16,098	10,100	-5,998	-37.3%

Environmental Management/Defense Facilities Closure Projects/Site Closure/Ohio

Fernald Environmental Management					
Project	271,441	283,452	285,299	1,847	0.7%
Miamisburg Environmental Management					
Project	88,921	90,544	70,939	-19,605	-21.7%
Total, Ohio	384,516	406,306	376,059	-30,247	-7.4%

Metrics Summary

	FY 2000	FY 2001	FY 2002
Release Site			
Cleanups	5	0	0
Facility Deactivation			
Deactivated During Period	4	5	2
Facility Decommissioning			
Cleanups	6	8	3
Mixed Low-Level Waste			
Treatment (m ³)	93	230	443
Disposal (m³)	267	50	51
Low-Level Waste			
Disposal (m³)	0	1,729	0

Site Description

Fernald Environmental Management Project

The Fernald Environmental Management Project site encompasses approximately 1,050 acres, located 17 miles northwest of Cincinnati, Ohio. High purity uranium metal products were produced at the Fernald Environmental Management Project site for the DOE and its predecessor agencies from 1951 to 1989. Thorium was also processed, on a smaller scale, and is still stored on-site. Uranium processing operations at the Fernald Environmental Management Project were limited to a fenced, 136-acre tract known as the Production Area. In November 1989, the Environmental Protection Agency placed the Fernald Environmental Management Project site on the National Priorities List, and in April 1990 DOE and the Environmental Protection Agency entered into a Consent Agreement (since amended) for site remediation.

The Consent Agreement created five Operable Units covering total site remediation. A new cost-plus-incentive fee completion contractor was competitively awarded in November 2000 which includes schedule performance incentives. The new contract carries the site to completion. The objective of the contract is to accelerate completion of the remediation and closure of Fernald. Incentives for both cost and schedule based activities were developed to ensure the contractor emphasizes cost control and project acceleration to obtain the maximum incentives. These incentives are tied to target cost, and target fee has been established in the contract.

The maximum fee incentive corresponds to the Department's vision of overall project completion by December 2006. The target completion date established in the contract is December 31, 2010. Fee will be paid provisionally until the work is completed. The contractor has the potential to earn as much as 12 percent fee based upon a combination of schedule acceleration and cost savings. There are also disincentives for delayed closure. The contractor will submit a revised baseline within the first six months of the contract.

The Fernald Environmental Management Project has utilized technologies such as a new inorganic treatment process to treat polychlorinated biphenyl contaminated low-level and mixed low-level waste (Tri-Mixed Treatment Demonstration), oxy-gasoline torch cutting, personal ice cooling system suits, vacuum removal of insulation materials, and process piping interior inspection (pipe explorer). Significant cost and schedule savings are being realized in the implementation of a technology demonstration project (injection of treated groundwater) that may reduce the groundwater remediation schedule from 27 to 10 years and the deployment of real time in-situ radiation characterization technologies of soil remediation areas where costs are being reduced by an estimated \$34,000,000 between FY 1998 and FY 2006.

Fernald Environmental Management Project is in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980; the Federal Facility Compliance Agreement; the Resource Conservation and Recovery Act; the National Energy Policy Act; and other pertinent regulatory requirements.

Ashtabula Environmental Management Project

The Ashtabula Environmental Management Project site, located in Ashtabula, Ohio, is owned and operated by the Earthline Technologies (formerly the RMI Titanium Company). The site is contaminated with both radiological and hazardous materials resulting from previous operations for the DOE to shape radioactive materials. The Ashtabula Environmental Management Project is comprised of three release sites and 26 buildings. The cleanup plan requires decontamination and decommissioning of buildings and the remediation of contaminated soils and groundwater to allow unrestricted use of the site. The Soil Washing System for Uranium Contaminated Soils, a technology development deployment with an estimated cost savings as much as \$20,000,000, was implemented in FY 1996 and continues to treat and reduce the volume of contaminated waste that must be shipped off-site to a disposal facility. Ashtabula Environmental Management Project is in compliance with a Nuclear Regulatory Commission/Ohio Department of Health Decontamination and Decommissioning Plan, a Resource Conservation and Recovery Act Part B Permit for returned storage of hazardous waste, and other regulatory requirements. Upon completion, the site will be released to Earthline Technologies for corporate use. Post-completion, long-term groundwater pump and treat operations may continue until FY 2016.

Columbus Environmental Management Project

The Columbus Environmental Management Project is comprised of two geographic sites (King Avenue and West Jefferson) located in and near Columbus, Ohio. Research and development work was performed at these facilities for the DOE and its predecessors agencies. The 15 affected buildings and grounds are privatelyowned by Battelle Memorial Institute. The facilities retain an active Nuclear Regulatory Commission license for possession of special nuclear material and are in compliance with all necessary regulatory requirements. Both sites are radioactively-contaminated and cleanup efforts have been funded by both the Defense and Non-Defense accounts based on their past research uses. The Columbus Environmental Management Project consists of 15 facilities and two release sites, of which 11 facility cleanups were completed by the end of FY 2000. Original scope of decontamination activities at King Avenue have been completed. Decontamination activities were initiated at West Jefferson in FY 2000. Significant technology development deployments at Columbus include the on-going operation of a transuranic waste laundry system and the successful demonstration of a pipe explorer at King Avenue.

Miamisburg Environmental Management Project

The Miamisburg Environmental Management Project manages the Mound Plant, which is located on 306 acres in Miamisburg, Ohio, ten miles south of Dayton. The plant was built in the late 1940's to support research and development, testing, and production activities for the Department's defense nuclear weapons complex and energy research programs. This mission continued until 1994, when these activities were transferred to other DOE facilities. The Mound Plant mission involved production of components which contained plutonium-238, polonium-210 and tritium, and processing large quantities of high explosives. As a result of these past operations, the buildings, soil, and groundwater are contaminated with radioactive and hazardous chemicals. The only remaining mission at Mound is the production of plutonium power systems by the Office of Nuclear Energy primarily for National Aeronautics and Space Administration space missions. This program will remain at Mound after the environmental remediation and transfer of the rest of the site is completed. The Miamisburg Environmental Management Project is on the Environmental Protection Agency National Priority List, and a Federal Facility Agreement to remediate the site has been negotiated with the Ohio and United States Environmental Protection Agencies.

In January 1998, the Department entered into a sales agreement with the Miamisburg Mound Community Improvement Corporation, an agent for the City of Miamisburg, to transfer the site to the City as parcels of real property are remediated. In FY 1999, two buildings and 27 acres were deeded over to the City. Two more buildings and another 100 acres will be transferred in FY 2001. By the end of FY 2001, 50 percent of the 107 buildings scheduled for removal from Mound will have been demolished or auctioned off; 25 percent of the 42 buildings scheduled for transfer to the City will have been decontaminated, decommissioned, and either transferred or made ready for transfer; and 67 percent of the 230 potential soil release sites will have been cleaned up. At Mound, a technology development deployment of a Soil Vapor Extraction System and Air Sparging for groundwater restoration is projected to accelerate cleanup from 30-100 years to 5 or less years. Technology development projects specifically deployed in FY 2000 include NOCHAR Tritiated Oil Solidification, oxy-gasoline torches, and masonry/debris crushing. Subsequent events and changing conditions over the past two years necessitate a baseline change which will significantly impact both project schedule and cost. Worker health and safety issues at various times has seriously curtailed work in "critical path" areas and additional personal radiation protection equipment to address these concerns has greatly contributed to increased project cost. Expanded project scope especially in the area of excavation of more contaminated soils has likewise significantly impacted cost and schedule. The closure date for Miamisburg Environmental Management Project will be evaluated during FY 2001 by considering the confidence in the scope of cleanup and level of agreement on cleanup approach, the contracting strategy and the contractor and workforce incentivization to completion cleanup, the opportunity to utilize facilities and capabilities at other sites to treat or provide interim storage of materials or waste, and available funding.

Detailed Program Justification

(dollars in thousands)					
FY 2000	FY 2001	FY 2002			

The Ohio projects are managed through incentivized contracts based on performance and utilize fixed-price subcontracts to assure the most efficient service to the Government. The scope planned for FY 2002 has been reviewed and is consistent with the goals of the site as outlined in the EM sites' baseline planning data. The Ohio projects included in this section of the budget have had external independent reviews by such organizations as the Corps of Engineers; Deloitte and Touche, Inc.; and Hill International of their baseline scopes and costs. The scope and funding requested for FY 2002 are consistent with the activities that have been reviewed.

The Ashtabula Environmental Management Project remediation project consists of the demolition or decontamination of 26 facilities, equipment disposal, and remediation of affected land areas and groundwater. Completion will allow the Nuclear Regulatory Commission to release the site to the owner and operating contractor, Earthline Technologies (formerly RMI Titanium Company), for unrestricted use. Facility remediation will be mostly by demolition and disposal of debris in licensed, off-site disposal facilities. If cost effective, some of the facilities will be decontaminated and returned to service. Most contaminated soil will be treated in the soil cleaning facility and replaced on-site. Groundwater will be remediated by conventional pump-and-treat methods.

- # Continue construction of the Waste Processing Facility and equipment installation.
- # Deactivate two facilities.
- # Commence the Sewage Treatment and Waste Water Treatment facility change-outs.
- # Conduct pre-remediation sampling and construct the Corrective Action Management Unit soil treatment facility.
- # Process (compression form) approximately 130 m³ of building mixed waste.

-	(dollars in thousands)					
	FY 2000	FY 2001	FY 2002			

- # Process approximately 1,080 m³ of building low-level waste remaining from FY 2001 building remediation and ship 1,027 m³ to Envirocare for disposal.
- # Stage the under-building soils in piles from the buildings demolished in FY 2001.
- # Ship 130 m^3 of low level debris waste to a DOE disposal site.

Metrics				
Facility Deactivation				
Deactivated during period		1	1	2
Facility Decommissioning				
Cleanups		2	3	2
Key Milestones				
# Campaign I soil remediation complete (Ju	ly 2000).			
# Decommissioning of three facilities comp	eted (September 2001).			
# Disposal of all Site Treatment Plan waste (September 2001).	s completed			
OH-AB-02/Project Management, Site S	Services,			

 Environmental, Safety and Health
 4,531
 5,416
 4,721

This project provides the management, safety and health administration, regulatory compliance, technical support, and site services necessary for the remediation work being performed at the Ashtabula Environmental Management Project to be conducted in a safe, environmentally compliant, and effective manner.

- # Maintain the site in a safe, compliant status, including: worker, site and facility air quality sampling and analysis; and effluent and groundwater sampling and analysis.
- # Maintain worker Environmental, Safety, and Health training.
- # Maintain site security including guard force and perimeter fences and internal exclusion zone control status.
- # Maintain applicable licenses, permits, records, and reporting status.
- # Monitor, report, and adjust work scope progress.
- # Ensure Building and Corrective Action Management Unit remediation activities are planned, documented, and conducted according to plans in a safe, regulatory compliant, and cost effective manner.

OH-CL-02-D/West Jefferson Site Decontamination			
(Defense)	5,953	12,298	6,300

(dollars in thousands)		
FY 2000	FY 2001	FY 2002

The West Jefferson site decommissioning effort involves three major buildings and approximately 6 acres of external grounds. The initial phase of the effort is removal of highly contaminated equipment and components from a group of hot cells in Building JN-1. Pressure washing, chemical bath processing, and careful sorting/segregation will be employed to minimize the amount of material which will require packaging as transuranic waste. Low-level, mixed low-level, and transuranic waste will be packaged and shipped off-site for treatment, storage, and disposal at DOE approved sites. Once the primary contamination sources have been removed from the buildings, interior decontamination will be performed using standard industrial techniques.

- # Continue remote-handled transuranic waste shipments to an off-site interim storage location site.
- # Initiate building JN-3 demolition.
- # Continue characterization of West Jefferson external areas.
- # Initiate building JN-1 interior decontamination.

Key Milestones

- # Sonatol Laundry System evaluation complete (April 2000).
- # Remove transuranic waste material from Waste Storage Shed (July 2001).

OH-CL-03-D/Project Management, Site Support, and

Maintenance	2,855	3,800	3,800
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The scope of this project is to provide technical support to the field work involved in the two related decontamination projects (King Avenue and West Jefferson sites), including surveillance and maintenance, project management and regulatory compliance.

- # Provide required core environmental activities and surveillance and maintenance activities.
- # Provide program management support, including regulatory compliance, quality assurance, public affairs, and project management.

OH-FN-01/Facility and Project Support	28,957	29,587	23,437
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(dollars in thousands)		
FY 2000	FY 2001	FY 2002

Facility and Project Support includes work scope from Project Support and Integration, Facilities Shutdown, and Site Project Services and Maintenance. Project Support and Integration provides administrative management and Technical Services. Facilities Shutdown performs utility disconnects on process equipment and structures, removal and disposition of residues from equipment, removal and disposition of uranium and process material, and removal of equipment as required. Site Project Services provides general site support, decontamination and site services, garage and transportation services, porters and laundry, and site project services administration. Decrease (-\$6,150,000) is result of safe shutdown residue disposition and reduction of site landlord services because of reduced remediation activities.

- # Continue facility shutdown of non-nuclear facilities.
- # Continue to treat and dispose of safe shutdown residues at an off-site facility.
- # Continue maintenance of vehicle fleet.
- # Provide clean working clothes, personal protection equipment, and respirators for use in site remediation.
- # Maintain grounds and buildings in working condition.

Metrics			
Mixed Low-Level Waste			
Disposal (m³)	0	0	1

OH-FN-02/Facility Decontamination and Dismantlement 13,898 16,877 34,347

The Facilities Decontamination and Dismantlement Project at Fernald is responsible for the decontamination and dismantlement of over 200 above grade structures of Operable Unit 3 (former Production Area and related buildings and equipment); design/engineering/planning work needed to support decontamination and dismantlement; and management of debris resulting from decontamination and dismantlement. Debris management includes: containerization, off-site disposal of wastes unsuitable for disposal in the On-Site Disposal Facility, recycling and/or release of materials, delivery of debris to interim storage, and delivery of On-Site Disposal Facility bound debris to identified staging/queuing areas. Additional facility decontamination and decommissioning; stockpiling materials until they can be disposed (+\$17,470,000).

- # Initiate the Multicomplex and Lab/Pilot Plant Complex decontamination and dismantlement.
- # Initiate planning and procurement activities for the Plant 1/Phase II and Administration Complexes.
- # Complete the Plant 6 Complex and East Warehouse Complex decontamination and dismantlement.

Metrics			
Facility Decommissioning			
Cleanups	0	2	1
Key Milestones			

		(dollars in thousands)		nds)
		FY 2000	FY 2001	FY 2002
_				
#	Maintenance/Tank Farm Certification of Construction Completion (March 2000).			
#	Plant 6/East Warehouse Notice to Proceed (May 2000).			
#	Submit Pilot Plant Complex Draft Implementation Plan to the Environmental Protection Agency (May 2001).			
#	Submit General Sump Draft Implementation Plan to the Environmental Protection Agency (July 2001).			
#	Submit Plant 8 Complex Draft Implementation Plan to the Environmental Protection Agency (October 2001).			
#	Submit Administration Complex Draft Implementation Plan to the Environmental Protection Agency (July 2002).			

The On-Site Disposal Facility project provides for disposal of the waste generated as a result of site remediation at Fernald. It will have seven disposal cells, and an eighth contingent cell, for acceptance of up to 2.5 million cubic yards of volume that meets established waste acceptance criteria. It also funds support facilities, receipt and placement of wastes and impacted materials, and facility closure. On-site disposal facility waste placement will be resequenced to increase efficiency of future waste placements.

- # Complete screening of clay and construct permanent cap for cell #3 of the On-Site Disposal Facility.
- # Continue environmental monitoring and maintenance at the On-Site Disposal Facility. This includes maintenance and operation of the permanent leachate system.

#	Place a total of 152,900 m ³ (200,000 cubic yards) of impacted materials in Cell On-Site Disposal Facility (September 2000).
#	Commence Cell 1 cap activities (October 2000).
#	Place 45,876 m ³ (60,000 cubic yards) of material in the On-Site Disposal Facility (September 2001).

 OH-FN-04/Aquifer Restoration
 19,957
 26,668
 20,498

(dollars in thousands)			
FY 2000	FY 2001	FY 2002	

This project is designed to confine and extract uranium contamination from the Great Miami Aquifer, a sole source aquifer that underlies the Fernald site. The project includes Operable Unit 5 workscope such as completion of the remedy decision process and implementation of remedial actions to address contaminated groundwater and surface water in addition to Project Support and Integration, Analytical Lab Services, Environmental Monitoring, and Sample and Data Management responsibilities. The Operable Unit 5 remedy includes sitewide management of storm water, wastewater, operation of sanitary sewage treatment system, and groundwater monitoring. The volumes of affected media are based upon cleanup levels finalized in the Operable Unit 5 Record of Decision. Completion of on-site modular laboratory and reduction in workscope for analytical sampling (-\$6,170,000).

- # Continue groundwater monitoring, plugging, abatement, sampling and reporting.
- # Continue extraction/injection operations and maintenance.
- # Process two billion gallons of wastewater/groundwater.
- # Continue wastewater treatment and Sewage Treatment Plant operations and maintenance.
- # Revise/update Integrated Environmental Management Project and Operations and Maintenance Plan.
- # Complete design for Pit Area and Plant 6 Area Extraction System.
- # Initiate and complete design for the South Field Extraction and the North Reinjection Systems.
- # Install additional extraction wells.

Ke #	y Milestones Processed more than two billion gallons of			
#	wastewater/groundwater (September 2000).			
#	Process two billion gallons of wastewater/groundwater (September 2001).			
#	Submit Pre-Final Waste Storage Area Extraction Design Package (Task 7) to the Environmental Protection Agency (November 2001).			
#	Process two billion gallons of wastewater/groundwater (September 2002).			
0	H-FN-05/Waste Pits Remediation Project	50,034	47,760	56,861

(dollars in thousands)			
FY 2000	FY 2001	FY 2002	

The Waste Pits Remedial Action Project (Operable Unit 1) includes remediation of approximately 37 acres located in the northwest corner of the Fernald Environmental Management Project. The target remedial features consist of Waste Pits 1 through 6; Burnpit; Clearwell; associated berms, liners, and contaminated surface soils. The work scope is to safely remediate and permanently dispose of all waste material located within its boundary. Implementation of the selected remedy involves the excavation of the waste pits, treatment of this material to achieve compliance with the Waste Acceptance Criteria for the permitted commercial disposal facility (currently, Envirocare); load material into railcars; and ship to the permitted commercial disposal facility for final disposal. Increased waste pit quantities being excavated and shipped (+\$9,101,000).

Continue to process, ship, and dispose of pit waste.

Key Milestones

- # Process and ship 92,570 m³ of waste pit material to permitted commercial disposal facility (September 2000).
- # Process and ship 62,497 m³ of waste pit material to permitted commercial disposal facility (September 2001).
- # Process and ship 92,570 m³ of waste pit material to permitted commercial disposal facility (September 2002).

Project includes design and remediation of former Operable Unit 2 Waste Units and sitewide remediation of impacted soils and debris as defined in Operable Unit 5 (Flora and Fauna) Record of Decision. Soils remediation includes excavation and hauling of impacted soils to the On-Site Disposal Facility; excavation and hauling of above Waste Acceptance Criteria soils to designated transfer area for processing in dryer facility; excavation, treatment, characterization, and shipment of Resource Conservation and Recovery Act and other materials to designated offsite storage facility; and characterization of all soils remediation areas, including predesign, excavation control, and precertification, and certification. Also included are Natural Resources restoration projects. All soils excavation activities will be resequenced in FY 2002.

- # Subject to contractor replanning under the new incentive contract, the planned activity for FY 2002 would be to complete close-out reports for all soils remediation activity.
- # Prepare Integrated Remedial Design package for Areas 3B/4B.
- # Additional activities include efforts to achieve interim shutdown pending continuation of soil remediation and remedial design work for subsurface area excavation.

(doll	lars	in	thousands)
۰.	uon	uus		unousunus,

FY 2000	FY 2001	FY 2002
112000	112001	1 1 2002

		FY 2000	FY 2001	FY 2002
Ke	y Milestones			
#	Submitted Pre-final Integrated Remedial Design package for Area 3A/4A to the Environmental Protection Agency (March 2000).			
#	Begin Area 3A soils excavation (September 2001).			
#	Submit Area 2, Phase II Integrated Remedial Design package to the Environmental Protection Agency (December 2001).			
#	Submit Integrated Remedial Design Package for Area 3B/Area 4B to the Environmental Protection Agency (April 2002).			

This project includes characterization and remediation of high specific activity wastes (residues from pitchblends and uranium ore processes) contained in Silos 1, 2, and 3. The final remediation phase for Silos 1, 2, and 3 will be implemented through facility design, construction, integrated system testing, operations, and facility decontamination and decommissioning. Remediation of all three silos involves retrieval of the material from the silos, treatment to stabilize waste, packaging, transportation and disposal at a permitted disposal facility. Additional activities are associated with an Accelerated Waste Retrieval Project (+\$17,487,000).

- # Complete the Pre-Operations phase of the Silo 3 subcontract.
- # Start and complete the operations phase of the Silo 3 subcontract.
- # Start the Facility Decontamination and Decommissioning phase of the Silo 3 subcontract.
- # Continue Facilities Ownership Activities.
- # Continue Project Management Oversight Activities.
- # Complete the Silos 1 and 2 Accelerated Waste Retrieval Radon Control System and Transfer Tank Area.
- # Begin the Silos 1 and 2 Full Scale Remediation Project.
- # Start work on the Silos 1 and 2 Full Scale Remediation Project Title I design.
- # Complete Radon Control System Phase I Operations for Silos 1 and 2 Accelerated Waste Retrieval.
- # Prepare for startup of operations for the Silos 1 and 2 Accelerated Waste Retrieval.

Key Milestones

- # Submit Radon Control System Phase I Remedial Action Work Plan to the Environmental Protection Agency (March 2001).
- # Submit Draft Remedial Action Work Plan for the Waste Retrieval Operations (August 2002).

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
OH-FN-08/Nuclear Materials	7,587	13,063	748

The nuclear materials project at Fernald includes disposition of low enriched, normal and depleted uranium. This material is left from the shutdown of the processing facilities and storage of miscellaneous materials from other facilities. However, disposition of the materials to an off-site location is needed in order to cleanup the site. Product inventory includes approximately 3,770 metric tons of remaining uranium materials. Product inventory remaining is reduced and project is nearing completion (-\$12,315,000).

Complete final shipments of all Fernald nuclear materials to Portsmouth.

Key Milestones

- # Ship 1,886,350 kg/bulk of nuclear material to the Oak Ridge Operations Office (September 2000).
- Ship 235,000 kg/bulk (235 MTU) of nuclear material to Portsmouth (Oak Ridge Operations Office) (September 2001).
- # Complete nuclear materials shipments offsite (June 2002).

This project will treat or process legacy and newly generated mixed waste to meet the requirement for off-site disposal, and includes scope for the disposition of hazardous waste generated during routine operations at Fernald. The scope includes stabilization, treatment of process residues, disposal of polychlorinated biphenyl contaminated waste, and treatment and disposal of hazardous solutions and chemicals, motor oil, and wastes not specifically covered in other projects.

Complete shipment of inorganic inventory to an off-site facility for treatment and disposition, begin packaging and shipping of Thorium requiring treatment to off-site facility for treatment and disposition and continued minimal waste treatment administration.

Me	etrics			
Miz	xed Low-Level Waste			
	Treatment (m ³)	93	230	443
	Disposal (m³)	267	50	50
Ke	y Milestones			
#	Ship two batches of liquids to the Toxic Substance Control Act incinerator in Oak Ridge, Tennessee (September 2000).			
#	Complete disposition of Low-Level Waste thorium destined for disposal at Nevada Test Site (September 2001).			
#	Complete disposition of Batches 10 and 11 Toxic Substance Control Act inventory (September 2001).			

	(dol	(dollars in thousands)		
	FY 2000	FY 2000 FY 2001 FY 2002		
# Ship lead waste materials to Envirocare for treatment (January 2002).				

OH-FN-11/Waste Management 18,442 25,094 26,922

This project encompasses the characterization, minimization, recycling, treatment, storage, and disposal of existing low-level and sanitary wastes at Fernald. It also includes disposition of uranium recently declared waste in December 1998. In addition, it includes program oversight and coordination of all organizations (including silo project) generating waste on-site. The key activities are the processing, packaging, staging, and shipping of low-level uranium waste residues, soils, liquids, construction debris, process area scrap, and other miscellaneous materials. Increase due to dispositioning additional quantities being declared waste and waste generating activities (+\$1,828,000).

- # Complete construction of new waste storage pad and shelter for waste storage.
- # Continue disposition of low-level waste residues processing by IT Corporation to Envirocare in Utah.
- # Continue disposition of low-level waste trash to Nevada Test Site.
- # Disposition of low-level waste thorium trash inventories.
- # Complete packaging and shipping of uranium waste not requiring treatment, depleted ingots and Code 2 derbies/misc metals to Nevada Test Site.
- # Conduct planning and characterization activities to begin treatment and packaging of Resource Conservation and Recovery Act Uranium Waste.
- # Complete characterization and packaging and begin shipment of enriched oxides metal/residues uranium waste.
- # Continue Waste Generator Services programmatic support including completion of the intermodal feasibility studies, characterization, and inventory management.

This project includes the program management and oversight activities to support the remediation of Fernald. It also provides for regulatory oversight and ongoing litigation costs. Activities include project planning, monitoring, reporting and scheduling. Program support functions include space management, program services, human resources, finance, contract and asset management, records/information/total quality management. Oversight and program integration functions include programmatic cost and budget, long range planning, safety and health, project controls, emergency services, environmental compliance, and quality assurance.

Submit the annual Resource Conservation and Recovery Act reports to the Environmental Protection Agency.

(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	

Submit the annual Superfund Amendments and Reauthorization Act Title III, 312 reports.

Key Milestones				
 Complete Phase II verification of Integrated Systems (January 2000). 	Safety Management			
# Award Fernald Environmental Management Contract (September 2000).	Project Management			
OH-MB-02/Main Hill Tritium		29,115	32,042	23,076
This project provides for the safe shutdown and equipment, duct work, and chemical mixtures reuse at the Miamisburg site. This project's per 2001 and the building has been transferred to # Continue deactivation of buildings SW, R	in four buildings, so they portion of the deactivation of OH-MB-07 for further de	may be demolis of HH building	shed or release was completed	
Key Milestones				
# Complete Deactivation of SW Building Area	F (September 2001).			
OH-MB-03/Waste Activities		13,196	14,397	13,213
This project focuses on the disposition of legal transuranic wastes as well as remediation gen low-level and mixed waste has been complete late FY 2001. Reduction of shipments of rem	erated waste. Disposition of ed. Disposition of transurar nediation and low-level wa	of excess nucle nic waste is sch	ar materials ar eduled to com	nd legacy
# Complete disposition of transuranic waste# Continue to use the concrete crusher to conc				
		بناء مدما سمسه مان	ation optimition	
# Dispose low-level and remediation waste	as generated from other p	rojects remedia	auon activities	
Metrics				
Low-level Waste				
Disposal (m ³)		0	1,729	0
Key Milestones				
 # Complete disposition of excess nuclear ma (September 2000). 	terials.			
# Complete disposition of all remediation was 2001 (September 2001).	ste generated in FY			

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
OH-MB-04/Main Hill Rad	2,489	704	0

This project involves the deactivation, decommissioning and demolition of seven radioactive buildings/structures. The buildings identified for demolition are (Research), (Semi-Works), (Cafeteria), (58 Semi-works filter bank), E&E Annex (environmental lab), H building (laundry and change room), and building B Stack.

No funding in FY 2002.

Metrics			
Facility Deactivation			
Deactivated during period	1	1	0
Facility Decommissioning			
Cleanups	0	1	0
Key Milestones			
# Demolish Building E-Analytical Labs and Annex to slab level (September 2000).			
# Complete decommissioning of Building E-Analytical Labs and Annex (September 2001).			

OH-MB-05/Main Hill Non Rad 3,287 2,111 0

This project provides for the evaluation, deactivation and release or demolition of 33 buildings/structures located primarily on the Main Hill. These buildings are not on the Exit Plan Critical Path, and can, therefore, be completed in parallel with other site activities.

No funding in FY 2002.

Metrics			
Facility Deactivation			
Deactivated during period	0	2	0
Facility Decommissioning			
Cleanups	2	1	0
Key Milestones			
# Complete M-Building On-Scene Coordinator Report (September 2000).			
# Demolish B Building to Slab Level (September 2001).			
OH-MB-06/Special Metals/Plutonium Processing Hill	4,335	1,977	2,000

(dollars in thousands)				
FY 2000	FY 2001	FY 2002		

This project involves the deactivation, decommissioning, and decontamination or demolition of 26 building/structures and the soil remediation of Release Site 266.

- # Continue deactivation and decommissioning of the Salt Storage Shed.
- # Continue deactivation and decommissioning and commence demolition of building 38.

Ме	trics			
Fa	cility Deactivation			
	Deactivated during period	1	0	0
Fa	cility Decommissioning			
	Cleanups	2	0	0
Ke	y Milestones			
#	Complete Building 88 decommissioning (September 2000).			
#	Complete plan for A-Line glovebox removal from Building 38 (September 2001).			

The purpose of this project is to perform safe shutdown and remediation activities on 44 buildings/structures at the Miamisburg site for release for local industrial use or demolition depending on the cost or need for reuse.

Continue the deactivation and decommissioning of the Waste Disposal building.

Metrics			
Facility Deactivation			
Deactivated during period	1	1	C
Facility Decommissioning			
Cleanups	0	1	0
Key Milestones			
# Building Waste Disposal - complete project plan (Phase II) for interior demolition (June 2000).			
# Complete removal of glovebox and drum puncture unit from WD Building, Room 10 (September 2001).			

(dollars in thousands)				
FY 2000	FY 2001	FY 2002		

This project encompasses four types of activities: further release site assessments (43 sites); Comprehensive Environmental Response, Compensation, and Liability Act removal actions (25 sites); groundwater treatment operation and maintenance (4 sites) and the Comprehensive Environmental Response, Compensation, and Liability Act site closeout (risk assessment, Record of Decision, and Finding of Suitability to Transfer). The purpose is to remove radionuclide, petroleum, and solvent contamination from the site. Groundwater treatment operation and maintenance includes the operation of two systems (pump and treat and air sparge/soil vapor extraction) and conducting quarterly groundwater monitoring.

- # Complete assessments of Release Sites 63, 273, 274/275, 91/92/94-98, 363, 397, and 398.
- # Continue groundwater remediation and monitoring efforts.

Me	trics			
Re	lease Site			
	Cleanups	5	0	0
Ke	y Milestones			
#	Complete potential release site 99 On-Scene Coordinator Report (April 2000).			
#	Complete potential release site 277 and 278 Assessment Reports (September 2001).			

The project scope ensures the site's facilities, infrastructure, heavy duty equipment and utilities are maintained in a manner conducive to the ultimate site disposition while ensuring the environment, safety and health of the site's workers and the local community. These activities are essential to maintain this site in a minimum safe condition. Certain non-remediation activities from PBSs MB02-08 have been consolidated within this PBS for better project management.

- # Continue efforts in reduction of energy use.
- # Continue general plant maintenance including yard and grounds, roads, and snow removal.
- # Continue operation of the Powerhouse, Satellite Chiller Plant, Water Treatment Facilities, Towers, and Deep Wells and the Sewage Treatment and Disposal Facilities.
- # Continue records management activities.
- # Continue payment of legacy retiree pension and medical benefits.

Key Milestones

- # Transfer Parcels 3 and 4 to the Miamisburg Mound Community
- Improvement Corporation (September 2001).

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
OH-MB-10/Regulatory Oversight and Site Support	1,588	3,454	3,650

This project contains all costs associated with State and Federal environmental protection agencies oversight of the site remediation activities; legal expenses; and Defense Contract Audit Agency audit support.

Continue level of effort support for State and Federal regulators as well as fulfilling all legal, tax and Defense Contract Audit Agency audit cost liabilities.

Key Milestones			
# Complete Phase II Verification of Integrated Safety Management Systems (September 2000).			
Total, Ohio	384,516	406,306	376,059

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs. FY 2001 (\$000)
OH-AB-01/Remediation	(4000)
# Deferral of activities necessary to support funding of higher priority requirements	-5,796
OH-AB-02/Project Management, Site Services, Environmental Safety and Health	
# Decrease due to a reprioritization between PBSs	-695
OH-CL-02-D/West Jefferson Site Decontamination (Defense)	
# Deferral of activities necessary to support funding of higher priority requirements	-5,998
OH-CL-03-D/Project Management, Site Support and Maintenance	
# Funding remains the same as FY 2001	0
OH-FN-01/Facility and Project Support	
# Decrease due to the result of safe shutdown residue disposition being completed in FY 2001 and a reduction in site landlord services due to decreased remediation activities in FY 2002.	-6,150
OH-FN-02/Facility Decontamination and Dismantlement	
# Increase is due to additional facility decontamination and decommissioning workscope being started in FY 2002 stockpiling materials	17,470
OH-FN-03/On-Site Disposal Facility	

	FY 2002 vs.
	FY 2001
	(\$000)
# Decrease due to resequencing to increase efficiency of future waste placements in On-Site	10.470
Disposal Facility and support funding higher priority requirements.	-12,472
OH-FN-04/Aquifer Restoration	
# Decrease due to completion of the new on-site modular laboratory in FY 2001 and a reduction in workscope for analytical sampling and sample data management in FY 2002 due to resequencing/curtailing in the On-Site Disposal Facility and Soils Excavation	
Projects	-6,170
OH-FN-05/Waste Pits Remediation Project	
# Increase due to increased waste pit quantities being excavated and shipped in FY 2002	9,101
OH-FN-06/Soils	
# Decrease due to curtailing of soils excavation activity in FY 2002	-4,780
OH-FN-07/Silos	
 Increase due to additional activities associated with the Accelerated Waste Retrieval Project currently under contract and the start of Title I and II design for the Silos 1 and 2 waste remediation contract 	17,487
OH-FN-08/Nuclear Materials	
# Decrease due to this project nearing completion for the dispositioning nuclear material from	
the site	-12,315
OH-FN-10/Mixed Waste	
# Increase due to larger quantities of project-generated mixed waste requiring treatment	3,259
OH-FN-11/Waste Management	
# Increase due to dispositioning additional quantities of uranium waste from the site	1,828
OH-FN-12/Program Support and Oversight	
# Decrease due to reprioritization of activities	-5,411
OH-MB-02/Main Hill Tritium	
# Decrease due primarily to planned reductions in allocated landlord costs	-8,966
OH-MB-03/Waste Activities	
# Decrease due to reduction of shipments of remediation and low-level wastes	-1,184
OH-MB-04/Main Hill Rad	
# Slight decrease due to funding other higher priority requirements.	-704
OH-MB-05/Main Hill Non Rad	
# Deferral of activities necessary to support other higher priority requirements	-2,111

		FY 2002 vs. FY 2001 (\$000)
O	H-MB-06/Special Metals/Plutonium Processing Hill	
#	Activities essentially stable	23
O	H-MB-07/Test Fire Valley	
#	Deferral of activities necessary to support higher priority requirements	-2,147
0	H-MB-08/Soils	
#	Decrease due primarily to completion of soil sampling in potential release site 66	-3,313
O	H-MB-09/Facility Operations and Maintenance	
#	Deferral of activities necessary to support higher priority requirements	-1,399
O	H-MB-10/Regulatory Oversight and Site Support	
#	Activity essentially stable	196
То	tal Funding Change, Ohio	-30,247

Rocky Flats

Mission Supporting Goals and Objectives

Program Mission

The mission of the Defense Facilities Closure Projects, Site Closure account, carried out by the Rocky Flats Field Office, is to oversee the cleanup and closure of the Rocky Flats Environmental Technology Site. This mission encompasses the management of the site waste and special nuclear materials and their removal from the site; the deactivation, decommissioning and demolition of the site facilities; and clean up, closure and conversion of the site to beneficial use in a manner that is safe, environmentally and socially responsible, physically secure, and cost-effective.

Program Goal

The goal for the Rocky Flats Environmental Technology Site is to achieve site closure by December, 2006.

Program Objectives

In 1997, the Secretary of Energy designated the Rocky Flats Environmental Technology Site as a pilot site for accelerated site closure, with an aggressive goal of achieving site closure by 2006. At that time, the baseline plan for cleanup activities supported a closure date of 2013. The site contractor accepted the challenge of accelerated closure and began in earnest to revise the project plan and schedules. The first 2006 Closure Project Baseline was submitted in May 1999. Following extensive review by the Department, this baseline was modified, approved and implemented in 1999. Due in large part to the contractor's success in accelerating the site closure schedule, as well as their performance towards closure, the Department negotiated a follow-on contract with the site contractor in early 2000. Although these negotiations were premised on the 2006 Closure Project Baseline, this contract marks a significant change and innovative approach to achieving accelerated site closure.

The new "closure contract" differs significantly from the previous management and integrating contract in that it is a cost-plus-incentive-fee arrangement. The contract specifies a target cost and schedule for reaching site closure. The contractual scope of work is clearly defined, and significant performance incentives are available to the contractor based on their ability to accelerate the completion of this scope at a reduced cost. Additionally, this contract places significant responsibility -- and performance risk -- on the Department to support the closure schedule by providing specific government-furnished services and items.

The target date for site closure, per the contract, is December 15, 2006, and the target cost of the contract is approximately \$4 billion, excluding incentive fee. The 2006 Closure Project Baseline has been revised to reflect the contract terms and conditions.

The details of this revised baseline are also different from previous versions because the project (project baseline summary) structure has been significantly streamlined. While the previous structure contained 29 projects, the current baseline has nine. There are projects for the four remaining major plutonium facilities that include all activities to complete remaining process deactivation, decommissioning, and demolition. Each project is comprised of similar functional workscope facilities on-site. Materials stewardship project covers the management and off-site shipment of both waste and special nuclear materials. In the baseline, this project also includes required safeguards and security activities. However, for budget purposes, these activities are reported in a separate PBS (RF-SS-DCL) in another portion of the Environmental Management budget request. There is a single project encompassing all planned environmental remediation scope. There are two support related projects: one that includes all technical project support such as environment, safety, and health and quality assurance programs; and one that includes all the administrative program support activities. This realignment presents a more facility-specific definition of the work scope, while providing a functional matrix of the needed site support. As a result, there is improved integration among the projects, and significantly streamlined project administration.

In addition to these nine projects embodying the contractual scope of work, there remain three Departmental projects that include the needed federal support, including support for activities at other DOE sites, and post closure responsibilities.

Another critical element necessary to support site closure is complex-wide integration -- specifically the coordination of activities and adequate support from other DOE sites (and commercial facilities) needed to support the off-site shipment of the special nuclear materials and radioactive wastes. Availability of sites to receive materials and waste is essential to achieving closure by 2006, including the continued availability of the Waste Isolation Pilot Plant in Carlsbad, New Mexico, for disposal of transuranic waste and plutonium residues; the Nevada Test Site in Las Vegas, Nevada, for disposal of low-level waste; the Toxic Substances Control Act Substances Incinerator in Oak Ridge, Tennessee, for the treatment of certain mixed low-level waste streams; the Savannah River Site in Aiken, South Carolina, for receipt and storage of plutonium metals and oxides and, potentially, other special nuclear material streams. Planning is also underway to direct certain special nuclear material to the Lawrence Livermore National Laboratory in Livermore, California.

The designation and continued availability of these or other receiver sites is not only key to the project critical path, but are now contractual obligations for the Department under the terms of the closure contract. For these reasons, the Department is developing detailed schedules for these and all other government-furnished services and items. The initial development of these schedules is being coordinated through the Headquarters program office within Environmental Management, but the Rocky Flats Field Office and numerous other Departmental sites are actively involved. These schedules will be aligned with the contractor's 2006 Closure Project Baseline to form a fully resource-loaded Integrated Closure Project Baseline, which will include all activities within the Department of Energy complex necessary to achieve the closure of the Rocky Flats Environmental Technology Site. It is expected that the Integrated Closure Project Baseline will be independently validated in the Spring

2001. Following this review, the integrated baseline will actively be used to manage the project and needed logistics support.

A summary of the major critical path activities as described within the revised project baseline summary structure is provided here. Additional detail on the scope of the new nine projects is provided later in this document.

Reconfiguration of the Protected Area

The collapse and reconfiguration of the Protected Area -- achieving an approximate 80 percent reduction in acreage within the fenceline – is key to reducing the requirements of safeguarding and securing the special nuclear material on-site and availing resources to support other closure activities. Under the previous baseline, it was planned that the original Protected Area configuration would be maintained until all special nuclear material was shipped off-site. The new baseline reflects the revised strategy of consolidating the material in Building 371, constructing a new barrier around this building, establishing downgraded material control areas in other buildings, and effectively shrinking the Protected Area by Spring 2001.

Stabilization and Off-Site Shipment of Special Nuclear Material and Residues

The early completion of the stabilization and deactivation activities is necessary for risk reduction and to allow building demolition to begin as soon as possible. Additionally, within the resource-leveled closure schedule, the funds supporting stabilization activities will be available upon completion for other closure activities.

The baseline calls for the off-site shipment of all special nuclear material to be completed by March 2003. All plutonium metals and oxides will be stabilized, placed in DOE-STD-3013 containers and shipped to K-Area at the Savannah River Site for storage. Due to technical issues, the initiation of packaging operations has been delayed. It is currently planned that the Plutonium Stabilization and Packaging System be started in April 2001. Despite this delay, the site is actively working towards an accelerated goal of September 2002 for special nuclear material shipment completion.

There are several other special nuclear material streams planned for off-site shipment during this same period. The necessary National Environmental Protection Act analysis and documentation is currently under development. The stabilization of various plutonium residue streams is also underway. Most of these residues will be stabilized, packaged, and shipped to the Waste Isolation Pilot Plant for disposal.

The stabilization and packaging operations for all special nuclear material areas are included in either the Building 371 Closure Project (PBS RF00A) or the Building 707 Closure Project (PBS RF00B). However, the preparations for actual off-site shipment are included in the Materials Stewardship Project (PBS RF00F). Additionally, some funding to support the availability of Departmental receiver sites is included in the Rocky Flats Program Support Project (PBS RF029), and some site preparation costs and container-related costs are included in other portions of the Environmental Management budget request.

In total, the special nuclear material stabilization efforts on-site will include the safe storage, processing, packaging, and off-site shipment of all special nuclear material at Rocky Flats. This includes lifecycle totals of approximately 2,000 containers of plutonium metals and oxides, 102,500 kilograms of plutonium residues, 24,000 liters of plutonium solutions, and over 400 other classified items or parts.

Facility Disposition after Special Nuclear Material is Removed

Facility deactivation activities will only be performed when there will be significant mortgage reduction realized prior to the initiation of full decontamination and demolition activities, or where deactivation is required prior to decommissioning activities commencing. The current baseline reflects improved scope definition and refined estimates for the decontamination and decommissioning of the remaining plutonium facilities. Significant lessons-learned were realized through the cleanup and demolition of Building 779, which was completed in January 2000.

Under the new baseline, efforts in the four remaining major plutonium facilities will continue in parallel, with Building 771 (PBS RF00C) slated for completion in FY 2004, followed by Building 776/7 (PBS RF00D) in early FY 2006 (although deactivation is planned in FY 2002), and Building 707 (PBS RF00B) and Building 371 (PBS RF00A) later in FY 2006.

Safe Storage, Treatment, and Disposal of Nuclear Waste

All waste management activities are now included within the Materials Stewardship Project, which focuses on safe, compliant, and cost-effective waste minimization, storage, treatment, and disposal of low-level, mixed low-level, transuranic, transuranic mixed, hazardous, and sanitary waste. The project's near-term goals involve continuing treatment of hazardous and sanitary wastes, off-site shipment and disposal of low-level waste, and off-site treatment and disposal of mixed low-level waste containing less than ten nanocuries/gram of radioactivity.

There are a number of programmatic challenges within the waste disposition campaigns. The continued availability of the Toxic Substances Control Act Incinerator at Oak Ridge for a number of mixed low-level waste streams is key to this goal. Additionally, continued shipments of transuranic and transuranic-mixed waste to the Waste Isolation Pilot Plant is a key program objective. While Rocky Flats was the first site within the Department to be certified to ship transuranic waste under the requirements of the Resource Conservation and Recovery and Act Part B Permit, additional process and waste stream approvals are needed to support a significantly increased shipping rate in FY 2002. Other major programmatic challenges include the identification of treatment options and disposal site for mixed low-level waste streams containing greater levels of radioactivity, as well as treatment for some individual transuranic waste types. Recent changes in the planned Advanced Mixed Waste Treatment Facility being constructed in Idaho have left several transuranic waste streams without a viable treatment path.

Site Remediation and Closure Cap Construction

The planned site remediation scope has not changed since the previous baseline, although it has been consolidated within a single project (PBS RF00G). Although site characterization is currently underway, fullblown remediation efforts will follow facility demolition. Currently, a single evapo-transpiration cap is planned for the 700 Area, although this approach still has not gained regulatory approvals. (The previously planned 300 Area cap was eliminated in the previous baseline based on the assumption that there will be limited underbuilding contamination in that area.). The detailed scope of the remediation efforts will be better understood as facility decontamination and demolition progresses. However, innovative technologies are currently being deployed to assess under-building contamination, where possible. Additionally, the scope of remediation required will be directly affected by the ongoing review of the interim radiological soil action levels currently reflected in the Rocky Flats Cleanup Agreement. A significant change to these levels could significantly increase the scope of the Environmental Remediation Project. This issue, as well as the baseline assumption that the on-site water will not meet the current water quality standard, is actively being discussed with both the regulators (the State of Colorado and the Environmental Protection Agency) and the stakeholders. In fact, the site has initiated a comprehensive integrated regulatory focus group centered on ensuring that all final cleanup decisions are both integrated and understood by the public.

Significant Accomplishments and Program Shifts

- # Stabilized 29,286 kilograms of plutonium-bearing residues (FY 2000); stabilize 29,015 kilograms of plutonium-bearing residues (FY 2001).
- # Completed the shipment of plutonium scrub alloy to Savannah River (FY 2000); complete shipment of classified metals to Los Alamos National Laboratory and Savannah River (FY 2001).
- # Consolidated special nuclear material on-site within Building 371, allowing the reconfiguration and reduction of the site Protected Area (FY 2001).
- # Completed draining of 16 and removal of 11 piping systems from Building 771 (FY 2000); complete draining of remaining piping systems in Building 771 (FY 2001).
- # Completed the demolition of Building 779 (FY 2000).
- # Disposed of 520 cubic meters of mixed low-level waste (FY 2000); dispose of 110 cubic meters of mixed low-level waste (FY 2001).
- # Following certification to ship under the requirements of the Resource Conservation and Recovery Act Part B Permit, resumed transuranic waste shipments to the Waste Isolation Pilot Plant and disposed of 249 cubic meters of transuranic waste (FY 2000); dispose of 1,000 cubic meters of transuranic waste (~175 shipments), requiring a gradual ramp up from two shipments per week to five shipments (FY 2001).
- # Continued to resolve issues related to the delayed startup of the Plutonium Stabilization and Packaging System (FY 2000); initiate Plutonium Stabilization and Packaging System operations and package 900 containers of plutonium metals and oxides and begin shipments to Savannah River Site for storage in the K-Area Materials Storage Facility (FY 2001).

Funding Schedule

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
RF-00A / Building 371Closure Project	141,462	73,084	61,455
RF-00B / Building 707 Closure Project	23,582	53,601	46,809
RF-00C / Building 771 Closure Project	41,650	62,845	57,222
RF-00D / Building 776 Closure Project	26,481	40,128	45,594
RF-00E / Industrial and Site Services Project	71,603	75,872	90,225
RF-00F / Material Stewardship Project	88,554	146,206	139,721
RF-00G / Remediation Project	9,856	7,743	16,880
RF-00H / Environmental, Engineering, Safety, Health and Quality			
Project	102,243	48,627	49,540
RF-00J / Support Project	95,010	86,123	96,811
RF-029 / Rocky Flats Field Office - DOE Management	16,567	25,145	24,320
Total, Rocky Flats	617,008	619,374	628,577

Funding by Site

(dollars in thousands)					
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Rocky Flats Environmental Technology					
Site	600,441	594,229	604,257	10,028	1.7%
Rocky Flats Field Office	16,567	25,145	24,320	-825	-3.3%
Total, Rocky Flats	617,008	619,374	628,577	9,203	1.5%

Metrics Summary

	FY 2000	FY 2001	FY 2002
Facility Decommissioning			
Cleanups	2	2	0
Nuclear Material Stabilized			
Plutonium Residue (kg/bulk)	29,286	29,015	5,093
Transuranic Waste			
Shipped to WIPP for Disposal (m ³)	249	1,000	2,824
Mixed Low-Level Waste			
Treatment (m ³)	513	0	0
Disposal (m³)	520	110	500

Environmental Management/Defense Facilities Closure Projects/Site Closure/ Rocky Flats

Site Description

The Rocky Flats Environmental Technology Site is located near Denver, Colorado, on about 11 square miles at the base of the Rocky Mountains. The Rocky Flats Plant was established by the Atomic Energy Commission in 1951 as one of seven production plants in the United States Weapons Complex. The Rocky Flats Plant played an integral part in the Nation's nuclear defense. Its mission was to manufacture nuclear weapons components from materials such as plutonium, beryllium, and uranium. When operations ceased, large amounts of plutonium, plutonium compounds, and metallic residues remained in the production lines, tanks, and process furnaces at various facilities at the site. Significant volumes of hazardous and radioactive waste generated during production operations were also present throughout numerous buildings.

In 1991, the Rocky Flats Plant transitioned to a new mission: cleaning up contamination and waste from its past activities and transitioning its facilities to cleanup in a manner that is safe, environmentally and socially responsible, physically secure, and cost-effective. It was at this time that the Rocky Flats Plant became the Rocky Flats Environmental Technology Site.

Detailed Program Justification

_	(dollars in thousands)					
	FY 2000	FY 2001	FY 2002			

The Rocky Flats Environmental Technology Site is managed through a cost-plus-incentive-fee closure contract, with fixed-price subcontracts, to assure the most cost-efficient service to the Government.

RF-00A / Building 371 Closure Project 141,462 73,084 61,455

The Building 371 Closure Project includes the remaining special nuclear material stabilization activities, including the operation of the Plutonium Stabilization and Packaging System to prepare unclassified plutonium metals and oxides for shipment to the Savannah River Site, and the processing of plutonium residues in preparation for shipment to the Waste Isolation Pilot Plant. All remaining special nuclear material has been consolidated within Building 371 for interim storage pending final packaging and shipment off-site, and the site Protected Area has been reconfigured around Building 371. This project also includes deactivation/special nuclear material removal, decontamination and decommissioning required to remediate the 22 facilities (356,357 sq. ft.) included within this cluster.

- # Complete stabilization and packaging of all remaining residues (wet, fluorides, dry and ash).
- # Complete stabilization and packaging of all plutonium metals and oxides.
- # Prepare the Plutonium Stabilization and Packaging System for deactivation.
- # Continue facility deactivation and decommissioning activities.

(dollars in thousands)

FY 2000 FY 2001 FY 2002

Me	trics					
Fa	acility Material Stabilized					
	Plutonium Residue (kg/bulk)	29,286	23,668	5,093		
Ke	y Milestones					
#	Package 900 3013 containers of Plutonium metal oxide (September 2001).					
#	Make 23,668kg disposition ready: salts, combustibles, ash dry/repack, sand, slag and crucible (September 2001).					
#	Complete Residue Stabilization (May 2002).					
#	Complete Special Nuclear Material Stabilization and Packaging (May 2002).					
#	Implementation Plan -Complete Residue Repackaging to Meet International Subcommission on Stratigraphic Classification (May 2002).					
#	Make 5,093kg disposition ready: salts, combustibles, ash, dry/repack, sand, slag and crucible (September 2002).					
#	Package 620 – 3013 containers of plutonium metal/oxide (September 2002).					

RF-00B / Building 707 Closure Project 23,582 53,601 46,809

The Building 707 Closure Project includes deactivation/special nuclear material removal, decontamination and decommissioning required to transition and remediate the Building facilities within the Building 707/750 cluster. Deactivation activities will be performed in parallel with special nuclear material holdup removal.

- # Continue glovebox and equipment strip out in Modules A, C, E, and K.
- # Complete deactivation of cold office spaces.
- # Complete deactivation of Modules E and J.
- # Complete deactivation of Building 778 Cluster.

Metrics			
Facility Material Stabilized			
Plutonium Residue (kg/bulk)	0	5,347	0
Key Milestones			
# Complete 1 Decontamination and Decommissioning Set (September 2002).			
RF-00C / Building 771 Closure Project	41,650	62,845	57,222
Environmental Management/Defense			

(d	ol	ars in thousa	nds)
FY 2000)	FY 2001	FY 2002

The Building 771 Closure Project includes deactivation/special nuclear m	naterial remov	al, decontami	ination,
decommissioning and closure of 30 facilities and 16 tanks within the But	ilding 771/774	cluster (76.0)31 sa. ft.).

decommissioning and closure of 30 facilities and 16 tanks within the Building 771/774 cluster (76,031 sq. ft.), as well as the support facilities and tanks remaining in the Building 779 cluster. The deactivation activities include the tapping, draining, and removal of the liquid plutonium piping systems and sludge removal from the tanks within Building 774.

- # Complete 8 decontamination and decommissioning worksets.
- # Complete characterization, dismantlement, and structural decontamination of Areas AD, AE and AN.
- # Tap and drain remaining piping systems.

Key Milestones

- # Complete 6 Decontamination and Decommissioning Sets (September 2001).
- # Complete Processing of all the Building 771 Liquids (March 2002).
- # Complete 8 Decontamination and Decommissioning Sets (September 2002).

The Building 776 Closure Project includes deactivation/special nuclear material removal, decontamination, decommissioning and closure of the facilities within the cluster (230,820 sq. ft.).

- # Complete Building 776/777 deactivation.
- # Dismantle items and complete 9 decontamination and decommissioning worksets.
- # Complete removal of hazardous materials.
- # Issue procurement package for Building 776/777 demolition plan.

Key	/ Milestones
#	Complete 27 Decontamination and Decommissioning Sets (September 2001).
#	Complete 9 Decontamination and Decommissioning Sets (September 2002).

 RF-00E / Industrial and Site Services Project
 71,603
 75,872
 90,225

(doll	lars in thousands)			
FY 2000	FY 2001	FY 2002		

The Industrial and Site Services Project includes all activities to deactivate, decontaminate, decommission, and close all buildings located within the Industrial Area that are not included in the 371, 707, 771 and 776 complexes. It also includes a variety of landlord functions and site services, including utility support for the site. Landlord functions consist of activities to ensure that the facilities are maintained in a safe, secure, environmentally compliant, and operable status until such time as they are no longer needed. Site services include:

- # Maintain site services: utilities (including the shutdown of the nitrogen plant); infrastructure; property and logistics; and facility maintenance/services.
- # Perform 400 Area facilities management.
- # Perform 800 Area facilities management and increase deactivation activities (stabilization, hazard, chemical and property removal).
- # Perform 100/300/500/900 Area facilities management, deactivation and decommissioning.

Me	trics			
Fa	cility Decommissioning			
	Cleanups	2	2	0
Ke	y Milestones			
#	Complete Building 111 Demolition (September 2001).			

The Material Stewardship Project includes the safe and compliant management of waste and nuclear materials in existing storage facilities, safe and compliant treatment of mixed wastes at on-site and off-site locations, and safe and compliant shipment of both waste and materials to off-site locations for either disposal or storage. This project also includes site-wide traffic and transportation services.

- # Perform waste facility management and waste management operations.
- # Conduct low-level and mixed low-level waste characterization in support of waste disposal.
- # Complete repack of mixed low-level waste chemicals.
- # Perform drum repack operations.
- # Prepare transuranic waste for shipment to the Waste Isolation Pilot Plant.

		(dollars in thousands)		
		FY 2000	FY 2001	FY 2002
Me	trics			
Tra	insuranic Waste			
	Shipped to Waste Isolation Pilot Plant for Disposal (m ³)	249	1,000	2,824
Mi>	ked Low-Level Waste			
	Treatment (m ³)	513	0	0
	Disposal (m ³)	520	110	500
Ke	y Milestones			
#	Ship 1,000 m ³ of transuranic waste to the Waste Isolation Pilot Plant (September 2001).			
#	Ship 5,600 m ³ of low-level waste for disposal (September 2001).			
#	Complete unclassified oxide shipments (October 2001).			
#	Ship 2,375 m ³ of mixed low-level waste off-site for disposal (September 2002).			
#	Ship 19,946 m ³ of low-level waste for disposal (September 2002).			
#	Ship 2,824 m ³ of transuranic waste to the Waste Isolation Pilot Plant (September 2002)			

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The Remediation Project includes the activities to characterize and remediate all areas of soil and water contamination on-site. The soil remediation efforts include: administrative closure of low-ranked individual hazardous substance sites, including documentation of no further action where remediation is not required; remediation of high-ranked individual hazardous substance sites; closure by capping; removal of site pavement and building foundations; and recontouring, regrading, and revegetation of the Industrial Area. The water remediation efforts include: the operation of the groundwater wells and surface water monitoring systems until decontamination, decommissioning, and capping activities are complete; operation of the interior and terminal ponds; conversion of the ponds to flow-through systems and conversion to wetlands; pollutant source controls including actinide migration evaluations; design, construction, and operation of groundwater containment and treatment systems.

- # Complete characterization of numerous release sites, including but not limited to: under-building contamination of Buildings 771, 774, and 779; solar ponds; various tanks; oil burn pit; drum storage area in the Property Utilization and Disposal Yard; and, pesticide storage areas.
- # Complete remediation of the following release sites: eastern and western-most process waste tanks; six concrete tanks; two contaminated sites near Building 771; the oil burn pit; and the pallet burnsite.

Key Milestones

[#] Land Configuration Design Basis Report Complete (April 2002).

	(dol	(dollars in thousands)		
	FY 2000	FY 2000 FY 2001 FY 200		
 # Complete Individual Hazardous Substance Site Group 900-2 (September 2002). 				

RF-00H / Environmental, Engineering, Safety, Health and

 Quality Project
 102,243
 48,627
 49,540

The scope of the Environmental, Engineering, Safety, Health and Quality Project includes site-wide quality assurance, safety, nuclear safety, training, engineering, and analytical services. Specifically, it includes the: occupational safety and industrial hygiene program; occupational medicine program; beryllium program; independent safety oversight; corrective action tracking system; quality assurance; Price Anderson Act Amendments-related activities; occurrence reporting and event investigation activities; environmental media management; Rocky Flats Cleanup Agreement implementation; training; and nuclear and industrial safety programs. The analytical services are provided by both on-site and off-site laboratories and provide analyses of organic, inorganic, radiochemistry, bioassay, water quality, and industrial hygiene services. This project also includes the site's environmental and regulatory interface, which provides: effluent air, ambient air and meteorological monitoring; air permitting and compliance; regulatory document review and reporting.

Provide site-wide engineering, environmental, safety and quality activities necessary to support ongoing closure activities.

The Support Project includes Kaiser-Hill executive management, financial, and administrative activities necessary to support the Rocky Flats Closure Project, including management, general counsel, internal audit, strategic planning and integration, administration (including finance and human resources), leased labor overhead, and other project support. This project also includes funds for the conditional target incentive fee.

Provide general support necessary for the execution of the closure project.

Key	/ Milestones
#	Annual Work Analysis Approval (September 2002).

RF-029 / Rocky Flats Field Office - DOE Management 16,567 25,145 24,320

_	(dollars in thousands)					
	FY 2000	FY 2001	FY 2002			

The Rocky Flats Field Office - DOE Management includes the ongoing support activities provided by the Rocky Flats Field Office necessary to support the execution of the Rocky Flats Closure Project and the execution of the Rocky Flats Closure Contract. Included in this project is funding supporting certain activities at other Departmental sites and within other Departmental programs to provide the government-furnished services and items required under the contract; i.e., the preparation and provision of receiver sites for nuclear materials and wastes, the certification of approved shipping containers, and certain transportation services.

Continue to maintain site utilities, environmental monitoring agreements, technical support to the Rocky Flats Field Office; educational and financial assistance agreements; litigation and contractor security investigation support activities; and government-furnished services and items required at Rocky Flats and other DOE sites as defined by the Rocky Flats Closure Contract.

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Total, Rocky Flats	617,008	619,374	628,577

Explanation of Funding Changes from FY 2001 to FY 2002

	FY 2002 vs. FY 2001 (\$000)
RF-00A / Building 371Closure Project	11,629
# Decrease reflects the completion of Plutonium Stabilization and Packaging System operations and the start of system deactivation. All residue work is complete.	
RF-00B / Building 707 Closure Project	6,792
# Decrease reflects the completion of hot strip out and termination of processing operations.	
RF-00C / Building 771 Closure Project	5,623
# Decrease reflects the completion of the technology deployment project jointly funded by th Office of Science and Technology and matching funds from within this PBS.	ıe
RF-00D / Building 776 Closure Project	. 5,466
# Increase reflects an increase in size-reduction activities commensurate with the ramp up in decontamination and decommissioning efforts.	
RF-00E / Industrial and Site Services Project	. 14,353
# Majority of the increase reflects increased deactivation activities (stabilization, hazard, chemical and property removal) within the 800 Area.	

		FY 2002 vs. FY 2001
ът		(\$000)
ĸŀ	F-00F / Materials Stewardship Project	-6,485
#	Decrease reflects reduction in planned number of Special Nuclear Materials shipments, based on initial baseline schedules.	
RF	F-00G / Remediation Project	9,137
#	Increase reflects ramp up in remediation activities, specifically the characterization of under- building contamination beneath Buildings 771, 774 and 779, and the increased number of release site remediations.	
RF	F-00H / Environmental, Engineering, Safety, Health and Quality Project	913
#	No significant change.	
RF	F-00J / Support Project	10,688
#	Increase reflects a change in the accounting of retirement costs; in FY 2001 they were funded through the allocation of indirect costs, and in FY 2002 they are directly funded within this project.	
RF	F-029 / Rocky Flats Field Office - DOE Management	-825
#	No significant change.	
Tot	tal Funding Change, Rocky Flats	9,203

Safeguards and Security

Program Mission

In FY 2001, the Safeguards and Security budget request for all Departmental elements was submitted by the Office of Security and Emergency Operations. In the FY 2001 Conference Appropriations Report, the conferees directed that responsibility for safeguards and security activities rests with the line programs. Funding was appropriated accordingly. In FY 2002, the Safeguards and Security budget has been integrated into the Environmental Management budget request to support the programmatic mission.

The mission of the Office of Environmental Management's Defense Facilities Closure Projects, Safeguards and Security program, (Fernald, Miamisburg, and the Rocky Flats Environmental Technology Site) is to ensure appropriate levels of protection against: unauthorized access, theft, diversion, loss of custody, or destruction of Department of Energy assets, hostile acts that may cause unacceptable adverse impacts on national security or the health and safety of DOE and contractor employees, the public or the environment. Each site has a tailored protection program as analyzed and defined in their Site Safeguards and Security Plan or other appropriate site security plan(s).

The closure sites contain a wide range of special nuclear material in various forms, types and quantities that drive the widely varying protection strategies at the closure facilities. Plutonium and enriched uranium in a variety of "attractive" and "unattractive" configurations are present. While the mission is to stabilize, ship, and "close" facilities, safeguards and security strategies are employed since mission accomplishment must ensure worker and public security and safety. In addition, some sites have "ceded" special nuclear material to the International Atomic Energy Agency and the protection of this material must be consistent with the Physical Protection Requirements implemented by all member states worldwide.

These sites are aggressively engaged in stabilization activities which result in the offsite shipment of stabilized nuclear material. As the inventory of these nuclear materials decrease, security areas can shrink to correspondingly smaller "islands" of responsibility. Access controls can be eased, Special Response Teams are no longer required and inventory requirements decrease from bimonthly to annually, or less under special circumstances. Classified documents, and cyber security decreases correspondingly as special nuclear material holdings decrease at the affected sites.

Environmental Management Defense Facilities Closure sites run the full spectrum of security interests. The security needs at individual facilities are driven by how far the site has progressed with its cleanup and closure activities. Sites processing large quantities of special nuclear material must ensure worker and public security and safety while providing a vast array of security. Examples include access controls, and electronic physical security systems supported by a protective force with trained security police officers, including Special Response Teams. An appropriate mix of "L" and "Q" cleared employees and in some cases the use of Human Reliability Programs are necessary to ensure a layered protection program. Information security requirements are usually limited to those required by the Secret Restricted Data information and matter at the sites. Nuclear material safeguards requirements for stabilization, packaging, and shipment place great demands upon the nuclear materials characterization, accounting and control programs. As closure activities progress, material characterization and accounting programs continue to support waste management and facility decommissioning activities.

Program Goal

The program goal of the EM Safeguards and Security program is to detect and defer the misuse and/or abuse of agreement property and prevent the entry of unauthorized personnel, provide appropriate protection of property, personnel, information, and nuclear materials in a technically sound and cost-effective manner, which may adversely affect the National Security, health and safety of employees, the public, and the environment.

Program Objectives

The objective of the Safeguards and Security program is to provide appropriate levels of protection of DOE security concerns; anticipate evolving threats; and maintain a balance of the security mission with the operation of the sites.

Performance Measures

One way EM is ensuring success is to establish and manage based on sound performance measures. 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 EM's goal of site closure and project completion.

Significant Accomplishments and Program Shifts

In FY 2002, security missions at the various sites may necessitate shifts in operational needs from a project and security standpoint as the sites move toward closure. All activities are defined by functional area. Specific accomplishments and functional area shifts of funds may be found in site details that follow this overview.

Funding Profile

	(dollars in thousands)				
	FY 2000				
	Comparable	Original	Adjustment	Comparable	FY 2002
	Appropriation	Appropriation	S	Appropriation	Request
Safeguards and Security	60,653	54,772	-121	54,651	45,902
Total, Defense Facilities Closure Projects,					
Safeguards and Security	60,653	54,772	-121	54,651	45,902

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"

Funding by Site

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Ohio Field Office					
Fernald	4,907	4,701	4,701	0	0.0%
Miamisburg	5,631	5,649	5,778	129	2.3%
Total, Ohio	10,538	10,350	10,479	129	1.2%
Rocky Flats Field Office	50,115	44,301	35,423	-8,878	-20.0%
Total, Safeguards and Security	60,653	54,651	45,902	-8,749	-16.0%

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Ohio/Fernald					
Protective Forces	2,531	3,166	3,367	201	6.3%
Material Control and Accountability	2,086	1,241	949	-292	-23.5%
Subtotal, Physical Security	4,617	4,407	4,316	-91	-2.1%
Cyber Security	290	294	385	91	31.0%
Total, Ohio/Fernald	4,907	4,701	4,701	0	0.0%
Ohio/Miamisburg (Mound)					
Protective Forces	2,974	2,830	2,750	-80	-2.8%
Physical Security	409	221	281	60	27.1%
Information Security	917	938	1,031	93	9.9%
Material Control and Accountability	135	83	90	7	8.4%
Program Management	274	357	423	66	18.5%
Subtotal, Physical Security	4,709	4,429	4,575	146	3.3%
Cyber Security	708	1,014	988	-26	-2.6%
Personnel Security	214	206	215	9	4.4%
Total, Ohio/Miamisburg (Mound)	5,631	5,649	5,778	129	2.3%
Rocky Flats Field Office					
Protective Forces	27,504	26,568	20,142	-6,426	-24.2%
Physical Security	3,712	1,160	788	-372	-32.1%
Information Security	1,946	1,684	1,435	-249	-14.8%
Material Control and Accountability	3,573	4,426	4,972	546	12.3%
Program Management	9,015	6,605	4,832	-1,773	-26.8%
Subtotal, Physical Security	45,750	40,443	32,169	-8,274	-20.5%
Cyber Security	1,203	1,462	1,328	-134	-9.2%
Personnel Security	3,162	2,396	1,926	-470	-19.6%
Total, Rocky Flats Field Office	50,115	44,301	35,423	-8,878	-20.0%
Total, Defense Facilities Closure Project,					
Safeguards and Security	60,653	54,651	45,902	-8,749	-16.0%

Detail Funding Profile

Ohio

Mission Supporting Goals and Objectives

Program Mission

The mission of the Defense Facilities Closure Projects, Safeguards and Security program, carried out by the Ohio Field Office, is to protect against: unauthorized access; unauthorized possession, use or sabotage of special nuclear materials; espionage; loss or theft of classified matter or Government property, including nuclear materials; and other hostile acts that may cause unacceptable adverse impacts on national security or on the health and safety of the Department of Energy and contractor employees, the public, or the environment.

Program Goal

Fernald's program goal is to detect and deter the misuse and/or abuse of government property and prevent the entry of authorized personnel.

The Miamisburg (Mound Plant) program goal is to use an integrated system of activities, systems, programs, facilities, and policies/procedures, implemented in a graded manner as determined by the potential risk to those security interests, to protect special nuclear materials, classified matter, Government property, and site personnel.

Program Objectives

The objective of the Safeguards and Security program at Fernald is to actively monitor areas of a security concern to insure all requirements are being met. The staff (10) and protective force (30) personnel conduct and maintain the necessary functions required to obtain the objective. These efforts include, but are not limited to, conducting routine patrols, manning site access points, lock and key, computer audits, investigations barriers to meet the requirements and to detect and deter misuse of government property and unauthorized access.

The objective of the Safeguards and Security program at the Mound Plant is to provide appropriate levels of protection to DOE security interests while coordinating/supporting the disposition of those security interests.

Significant Accomplishments and Program Shifts

Security missions at the Ohio sites will necessitate continual shifts in operational needs from a project and security standpoint. Flexibility will be required to accommodate these changing needs, and as the Ohio sites move to closure, a graded approach will be applied.

Funding Schedule

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
OHFN-SS-DCL / Fernald Safeguards and Security	4,907	4,701	4,701
OHMB-SS-DCL / Miamisburg Safeguards and Security	5,631	5,649	5,778
Total, Ohio	10,538	10,350	10,479

Funding by Site

	(dollars in thousands)				
	FY 2000 FY 2001 FY 2002 \$ Change % Chang				
Fernald	4,907	4,701	4,701	0	0.0%
Miamisburg	5,631	5,649	5,778	129	2.3%
Total, Ohio	10,538	10,350	10,479	129	1.2%

Site Description

Fernald

The Fernald Environmental Management Project is located on a 1050-acre site in southwestern Ohio, approximately 18 miles northwest of Cincinnati. The mission of the Fernald Environmental Management Project is to remove and dispose of all site nuclear materials, carry out decontamination and decommissioning of all site buildings and facilities, and return as much of the site as possible to public use. The security function at Fernald is responsible for a program based on the needs identified in the Physical Protection Security Plan and the Materials Control and Accountability Plan, approved annually by the DOE-Ohio Field Office.

The Materials Control and Accountability program provides for the warehousing, surveillance, and handling and packaging, for onsite storage, of depleted, normal and enriched uranium materials in various physical states, that are currently stored at the Fernald Environmental Management Project for offsite disposition. The baseline plan is for nuclear material to be shipped offsite by November 2001. The current forecast for the offsite disposition of nuclear material is scheduled for March 2002. Storage and accountability must be in accordance with DOE Order 474.1 "Control and Accountability for Nuclear Materials", and with DOE Order 232.1 "Occurrence Reporting and Processing of Operations Information". The Physical Protection Forces consists of an unarmed protective force activated 24 hours/day, 7 days/week and employs established protective strategies to detect and deter the theft, misuse and/or damage of government property. The Physical Security Protection Systems activities include physical barriers, lighting, lock and key program, administrative controls, training, and procedures. The Personnel Security element includes maintaining site access control, badging, background security investigations, fraud and abuse investigations, foreign visits and assignments, security databases, and visitor access control. Cyber Security activities primarily involve the development and implementation of computer security policies and procedures. Examples are the annual Computer Protection Plan, Computer

Backups, Establishment of Computer User Accounts, Audits and Certifications and the Disaster Recovery Plan. Additional significant duties include monitoring Internet Access, random sampling of user files and specific user investigations at the request of Legal, Human Resources, or other departments. Lesser activities include the regular configuration of computer security protection measures in the configuration of hardware and software.

Mound Miamisburg Environmental Management Project (Mound Plant)

The Miamisburg Environmental Management Program, formerly known as the Mound Plant, is located on 306 acres in southwestern Ohio, within the southern boundary of the Miamisburg city limits. The Miamisburg Environmental Management Program's current mission is site cleanup and the transition of the site to the local community. The security function of the Miamisburg Environmental Management Program is responsible for providing appropriate levels of protection against unauthorized possession, use, or sabotage of special nuclear materials; espionage; loss or theft of classified matter or Government property, including nuclear materials; and other hostile acts that may cause unacceptable adverse impacts on national security or on the health and safety of DOE and contractor employees, the public, or the environment.

The Safeguards and Security program consists of an integrated system of activities, systems, programs, facilities, and policies/procedures for the protection of special nuclear materials, classified information, and DOE property and personnel as required by the Atomic Energy Act of 1954, as amended, other Federal Statutes, Executive Orders, and other directives. Safeguards and Security management uses the DOE Design Basis Threat Policy, in the design and implementation of protection programs; providing appropriate levels of protection, in a graded manner, in accordance with the potential risks to DOE security interests at the Mound Site.

Detailed Program Justification

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
OHFN-SS-DCL / Fernald Safeguards and Security	4,907	4,701	4,701
Physical Security	4,617	4,407	4,316

- # Material control and accountability efforts provides for the warehousing, surveillance, and handling and packaging for onsite storage of depleted, normal, and enriched uranium materials in various physical states, that are currently stored at Fernald for offsite disposition.
- # Protective Forces provides an unarmed protective force activated 24 hours/day, 7 days/week and continue to employ established protective strategies to detect and deter the theft, misuse and/or damage of government property. Site-wide physical protective force components include maintaining physical barriers, protective force patrols, vehicle maintenance, perimeter fence maintenance, searches, badge verification, monitoring cameras, administrative controls, employee awareness, training, and procedures.

(dollars in thousands)				
FY 2000	FY 2001	FY 2002		

290

294

Physical Security - includes protective strategies to provide intrusion detection, barriers, access controls, tamper protection monitoring, and performance testing of security systems according to the approved site performance testing plan.

Cyber Security

385

Activities include the development and implementation of computer security policies and procedures, monitoring Internet access, random sampling of user files and specific user investigations at the request of Legal, Human Resources, or other Departmental elements, and regular configuration of computer security protection measures in the configuration of hardware and software.

OHMB-SS-DCL / Miamisburg Safeguards and Security	5,631	5,649	5,778
Physical Security	4,709	4,429	4,575

- # Protective Forces A three-shift, 24-hour-a-day operation utilizing five shift lieutenants and 17 security officers to protect special nuclear materials, classified matter and materials located in 18 limited areas, and government property within an 180-acre Property Protection Area.
- # Physical Security A lockshop servicing 40 repositories, 18 Limited Area, and lock/key systems in 82 buildings; administration of the intrusion detection system with over 500 alarm points and the badge reader system including approximately 100 reader locations; sensor and reader operability testing and Loss Prevention involving an average of 15 cases annually, with a value of ~ \$12,000.
- # Information Security Performs and documents approximately 500 classification decisions on an annual basis, performs an annual inventory of potential technical surveillance equipment, coordinates the operations security program, conducts a Large Scale Declassification Review project and a Classified Document Consolidation Project to consolidate and then minimize the physical volume of classified matter on site through the use of electronic imaging.
- # Material Control and Accountability Oversight required to assure containment, surveillance, control, measurement, inventory, accounting, recording, and reporting requirements for ten different accountable nuclear materials totaling approximately 20 kilograms. Additionally, the Nuclear Material and Accountability program conducts and maintains inventories for precious metals and nuclear waste, and performs required reporting for their associated shipments.
- # Program Management Management and administration of all applicable Safeguards and Security subprograms – including a multitude of elemental safeguards and security functions, programs, and special projects, such as the Classified Document Consolidation Project.

		(dollars in thousands)		
		FY 2000	FY 2001	FY 2002
	_			
Cyber Security		708	1,014	988

Ensures that all DOE unclassified information and information systems, including approximately 700 personal computers and 11 servers, are protected in a manner that is consistent with Mound's threats and its missions at all times; and to protect classified information on systems that process classified information (currently 12 stand-alone personal computers). Cyber infrastructure includes personal computer workstation virus protection, hardware sanitization, software auditing, server administration and data network support. COMSEC activities, which are limited to control of two classified facsimile machines and 11 STU-III telephones, and TEMPEST activities, which are limited to the evaluation/assessment of 12 stand-alone classified personal computers.

Personnel Security

214 206 215

Processing access authorization actions of personnel security cases for determining eligibility for access authorizations; (40 reinvestigations, six upgrades, 20 reinstatements, and 7 initial investigations are expected in FY 2002), processing Limited (Security) Area visits (approximately 400 uncleared visitors and approximately 100 classified visits), coordinating 50 pre-employment investigations, processing four to six derogatory information reports, processing limited facility data approval records (seven initials and nine annual updates), and maintaining the security badge system including 950 employee/temporary badges, 250 DOE badges, and 461 subcontractor badges. Coordination of Security Awareness Program for approximately 750 employees and 280 subcontractors.

Total, Ohio	10,538	10,350	10,479
	_ = = = = = =		

Explanation of Funding Changes From FY 2001 to FY 2002

	FY 2002 vs. FY 2001 (\$000)
 OHMB-SS-DCL / Miamisburg Safeguards and Security # No significant change (2.3 percent). 	129
Total Funding Change, Ohio	129

Rocky Flats

Mission Supporting Goals and Objectives

Program Mission

The mission of the Defense Facilities Closure Projects, Safeguards and Security program, carried out by the Rocky Flats Environmental Technology Site, is special nuclear material management, site cleanup, environmental restoration, deactivation, and decontamination and decommissioning of facilities. The safeguards and security program provides a safe and secure environment at Rocky Flats through the implementation of requirements established in DOE Orders.

Program Goal

The goal for the Rocky Flats Environmental Technology Site is to achieve site closure by FY 2006.

Program Objectives

Closure of the Site is critically dependent on the availability of other DOE sites and commercial facilities to receive the entire Site inventory of special nuclear material and waste. The aggressive schedule and numerous uncertainties require significant management attention at the contractor, Rocky Flats Field Office, and DOE Headquarters levels. The Department is committed to maintaining the focus on the necessary inter-site (programmatic risk) issues. Numerous uncertainties also exist in the DOE and Kaiser-Hill's ability to deactivate and tear down major nuclear buildings.

The 2006 critical path tracks through these major objectives: 1) Residue processing/packaging and shipping to offsite locations; 2) Reducing the protected area to a smaller protected area around Buildings 371 and 374 (and eventual closure of the protected area); 3) Conducting deactivation, decontamination and decommissioning activities in parallel in major nuclear buildings; and 4) Environmental restoration and construction of a closure cap.

The current strategy overview for reducing the protected area is:

- # All Category I and II special nuclear material items will be removed to Building 371 or shipped offsite;
- # Protection of the protected area around Building 371/374 will be based on a vulnerability assessment, performance testing and verification, and DOE approval;
- # Compliance with DOE Orders will be achieved or deviations will be formally requested; and
- # Classified matter and Category III quantities of special nuclear materials will be maintained in approved storage within Limited Areas or the reduced protected area.

Reduction of the protected area is being undertaken because of the opportunities to achieve cost savings in many area including clearance processing, escort costs, and easier access for uncleared personnel and vehicles to facilities outside the reduced protected area while those facilities undergo deactivation, decontamination, decommissioning, and demolition. Reduction of the protected area is a major step towards elimination of the need for maintaining a site protected area and ultimately towards achieving a safe and efficient acceleration of site closure.

Significant Accomplishments and Program Shifts

- # Reconfigured the Protected Area around Buildings 371 and 374 including the construction of new barrier and the establishment, validation, verification, and initiation of reduced material control areas in the other major plutonium facilities (FY 2001).
- # Flexibility will be required to accommodate changing needs at the site as Rocky Flats moves toward Closure by FY 2006.

Funding Schedule

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
RF-SS-DCL / Rocky Flats Safeguards and Security	50,115	44,301	35,423
Total, Rocky Flats	50,115	44,301	35,423

Funding by Site

	(dollars in thousands)				
	FY 2000	FY 2001	FY 2002	\$ Change	% Change
Rocky Flats Field Office	50,115	44,301	35,423	-8,878	-20.0%
Total, Rocky Flats	50,115	44,301	35,423	-8,878	-20.0%

Site Description

Rocky Flats

The Rocky Flats Field Office is responsible for oversight of the Rocky Flats Environmental Technology Site. The Rocky Flats Environmental Technology Site is situated on a 6,262 acre reserve located 16 miles northwest of Denver, Colorado. The Rocky Flats Environmental Technology Site lists their current mission as special nuclear material management, site cleanup, environmental restoration, deactivation, and decontamination and decommissioning of facilities. The safeguards and security program provides a safe and secure environment at Rocky Flats through the implementation of requirements established in DOE Orders.

Detailed Program Justification

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
RF-SS-DCL / Rocky Flats Safeguards and Security	50,115	44,301	35,423
Physical Security	45,750	40,443	32,169

Protective Forces - protects life and property at the Rocky Flats Environmental Technology Site, DOE interests from theft, diversion, sabotage, espionage, unauthorized access, and other hostile acts that could cause an adverse impact on National security, the environment, or health and safety of employees.

- # Physical Security ensures the effective operation, maintenance, and testing of security systems, including the Perimeter Intrusion Detection and Assessment System, portal monitors, security metal detectors, x-ray package search systems, access control systems, explosive detection, central alarm station, and secondary alarm station. Also, includes lock and key activities for tracking of safes, combinations, issued/lost keys, re-keying or combination change for terminated or personnel changes, and maintenance of various locking systems.
- # Information Security provides overall guidance and direction to programs including: classified material control and protection; violations of laws, losses, and incidents of security concerns; safeguards and security awareness; operational security; counterintelligence; facility survey and approval; foreign ownership, control and influence; technical surveillance countermeasures; automated information security; and communications security.
- # Material Control and Accountability implements the basic principles and requirements for the control and accountability of all nuclear materials. The Material Control and Accountability Program is designed to deter, detect, respond to unauthorized possession, and use or sabotage of nuclear materials. This program includes safeguards and accountability, measurements, non-destructive assays, physical inventories, and operating material accountability systems.

Cyber Security

1,203 1,462 1,328

2.396

1.926

3.162

Cyber Security - provides the management of the systems compliance requirements as defined by DOE Orders and Directives for information protection, and the design, development, integration, deployment, and certification of all cyber security related and infrastructure components of the EM program.

Personnel Security

Personnel Security - provides preparation, submission, and tracking of clearance actions concerning contractor employees assigned permanently or temporarily at the Rocky Flats Environmental Technology Site. The Foreign Visit and Assignment Program and badging activities are also included in this activity.

	(dollars in thousands)		
	FY 2000	FY 2001	FY 2002
Total, Rocky Flats	50,115	44,301	35,423

Explanation of Funding Changes From FY 2001 to FY 2002

	FY 2002 vs. FY 2001 (\$000)
RF-SS-DCL / Rocky Flats Safeguards and Security	
# Decrease in funding reflects the projected reconfiguration of the Protected Area, which will allow opportunities to achieve cost savings in many of the functional areas and achieve a	
safe and efficient acceleration of site closure.	-8,878
Total Funding Change, Rocky Flats	-8,878