Uranium Enrichment Decontamination and Decommissioning Fund

Proposed Appropriation Language

For necessary expenses in carrying out uranium enrichment facility decontamination and decommissioning, remedial actions and other activities of title II of the Atomic Energy Act of 1954 and title X, subtitle A of the Energy Policy Act of 1992, [$220,200,000] *$240,198,000,* to be derived from the Fund, to remain available until expended: *Provided*, That $30,000,000 of amounts derived from the Fund for such expenses shall be available in accordance with title X, subtitle A, of the Energy Policy Act of 1992. *(Energy and Water Development Appropriations Act, 1999.)*

Explanation of Change

None

Uranium Enrichment Decontamination and Decommissioning Fund

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund was established by the Energy Policy Act of 1992 to carry out environmental management responsibilities at the nation's three gaseous diffusion plants. The three gaseous diffusion plants are located in the East Tennessee Technology Park in Tennessee, at the Portsmouth site in Ohio, and at the Paducah site in Kentucky. The Energy Policy Act also directs that this Fund be used to reimburse licensees operating uranium or thorium processing sites for the costs of environmental cleanup at those sites, subject to a site specific reimbursement limit.

The Uranium Enrichment Decontamination and Decommissioning Fund is an integral and necessary component of legislation to privatize uranium enrichment activities in the United States. The Uranium Enrichment Decontamination and Decommissioning Fund addresses the cleanup liabilities at the three gaseous diffusion plants that are attributable to historical DOE operations for weapons and commercial fuel. The future operations of the enrichment facilities will be managed by the commercial United States Enrichment Corporation. Ultimate cleanup of the facilities that are leased from the Department by the United States Enrichment Corporation will commence when operations are completed and the leases are terminated. The Decontamination and Decommissioning Fund includes contributions from annual budget appropriations and contributions from commercial utilities based upon historical enrichment services, measured in "separative work units."

Program Goal

The goal of the Uranium Enrichment Decontamination and Decommissioning Fund is to cleanup the surplus enrichment plants as soon as possible and reimburse licensees for their remediation activities at uranium and thorium sites. The enrichment plants include valuable facilities and equipment, and the cleanup costs will be offset to the extent that the Department is able to recover the value from these surplus assets.

Program Objectives

The Department plans to "re-industrialize" the surplus sites and infrastructure which will reduce the Department's cleanup cost and will transfer the surplus federal facilities to private sector firms for productive re-use. In this way, the local socio-economic impacts of shutting down these facilities will be offset by increased commercial job creation.

Performance Measures

EM has moved aggressively towards developing and implementing a performance-based budget that clearly demonstrates the program and project results expected with the resources requested. Building upon past experience, the FY 2000 budget was enhanced by aligning performance measures by project within the specific appropriation and program accounts. These performance measures can be found in the site details that follow.

Significant Accomplishments and Program Shifts

The FY 2000 budget request fully reflects the project-oriented structure that EM has developed as a key component to accelerate cleanup and reduce costs. All EM activities have been organized into projects which have a defined scope, schedule, cost, and end state. Through the strategies identified in the *Accelerating Cleanup: Paths to Closure* document, 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.

Funding Profile

(dollars in thousands)

	FY 1998 Current Appropriation	FY 1999 Original Appropriation	FY 1999 Adjustments	FY 1999 Current Appropriation	FY 2000 Request
Uranium Enrichment D&D Fund	190,200	190,200	0	190,200	210,198
Uranium/Thorium Reimbursement	40,000	30,000	0	30,000	30,000
Total, UE D&D Fund	230,200	220,200	0	220,200	240,198

Title X, Subtitle A, Energy Policy Act of 1992

Funding by Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	$ Change	% Change
Oak Ridge Operations Office	190,200	190,200	210,198	19,998	10.5%
Multisite	40,000	30,000	30,000	0	>999.9%
Total, UE D&D Fund	230,200	220,200	240,198	19,998	9.1%

Oak Ridge

Mission Supporting Goals and Objectives

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund was established by the Energy Policy Act of 1992 and is carried out by the Oak Ridge Operations Office to cleanup the nation's three gaseous diffusion plants. The three gaseous diffusion plants are located in Oak Ridge, Tennessee; Portsmouth, Ohio; and Paducah, Kentucky. The gaseous diffusion plant in Oak Ridge was shut down in 1985. The plants in Portsmouth and Paducah have been operated by the United States Enrichment Corporation since 1993. The Uranium Enrichment Decontamination and Decommissioning Fund supports decontamination and decommissioning, remedial actions, waste management, and surveillance and maintenance of the three gaseous diffusion plants. The Uranium Enrichment Decontamination and Decommissioning Fund is currently the sole funding source for cleanup at Portsmouth and Paducah, and is the dominant source of funds for the Oak Ridge Gaseous Diffusion Plant. The Uranium Enrichment Decontamination and Decommissioning Fund also reimburses licensees for cleanup of uranium and thorium processing sites that previously sold these materials to the government.

Program Goal

The Oak Ridge Operations Office goals are to continue ongoing remedial actions to prevent the spread of existing contamination, and waste management activities to address legacy wastes at the sites; complete ongoing remedial actions by FY 2002 and waste management activities by FY 2005 at Portsmouth and complete ongoing remedial action and waste management activities at Paducah by FY 2010. Comprehensive decontamination and decommissioning and cleanup of these sites cannot be completed until the privatized United States Enrichment Corporation terminates the leases on the two plants. The Department's cleanup goal for the gaseous diffusion plants will allow reuse of the sites for industrial purposes. To fulfill this goal, the Department must remove hazardous materials, treat and dispose of legacy waste, remediate sites to meet industrial reuse standards, decontaminate facilities to allow reuse, and demolish unusable facilities. Where possible, new technologies will be employed to address waste treatment, groundwater cleanup, and facility decontamination. The East Tennessee Technology Park is implementing all of these aspects in the ongoing cleanup program. The Department is actively transitioning the site from a federally-managed DOE installation to a privately-managed industrial park. The name of the site was changed from the Oak Ridge Gaseous Diffusion Plant to the East Tennessee Technology Park to reflect this ongoing transition. The leasing program will be fully implemented by 2006 and the site cleanup will be complete in 2009. The timely cleanup of the Oak Ridge site will free up funds to address cleanup at other sites following the cessation of operations. The cleanup program is being carried out under the requirements of federal and state compliance agreements that reflect community stakeholder involvement.

Program Objectives

The primary objective at Oak Ridge sites is to conduct remedial actions to limit the spread of contamination, waste management to remove legacy waste, and decommissioning to disposition the process and ancillary buildings. New technologies will be deployed, where possible, to address trichloroethylene contaminated soil and groundwater, for treatment of mixed waste, and for facility decontamination. Another objective is to solve cleanup challenges related to the significant amount of legacy wastes, the size and physical condition of the processing facilities and the areal extent of soil and groundwater contamination. For example, the Paducah groundwater plumes contain one of the largest volumes of off-site contamination in the Department of Energy complex.

The Oak Ridge Gaseous Diffusion Plant is shutdown, and the focus is on cleanup followed by re-use of viable facilities by private sector firms. Decommissioning of the three process buildings at the site will be completed to allow reuse by FY 2003.

Funding is requested to continue remedial actions that have prevented off-site migration of contaminants through groundwater at Portsmouth and reduce further migration of off-site groundwater plumes at Paducah. The Department plans to complete ongoing remediation at Portsmouth by FY 2002 and Paducah by FY 2010.

Performance Measures

Performance measures are provided at an aggregate level after the Funding by Site table as well as at a project level in the Detailed Program Justification.

Significant Accomplishments and Program Shifts

East Tennessee Technology Park

- Mobilized and began removal of nuclear and non-nuclear equipment (FY 1998); construct and begin operations of the decommissioning workshop and continue equipment removal (FY 1999); and initiate decontamination processing and authorized releases of clean metals (FY 1999) from the K-33 Process Building under the three building decommissioning contract to reduce outyear mortgage costs for surveillance and maintenance cost and provide beneficial reuse of buildings.
- Completed Defense Nuclear Facilities Safety Board 94-1 compliance driven Deposit Removal Project (FY 1998).
- Initiated and completed Group 1 Auxiliary Facilities Demolition Project, and initiated Building K-1420 decommissioning to reduce out year mortgage cost for surveillance and maintenance (FY 1998).
- Complete cleanup of classified burial ground and Mitchell Branch plumes to mitigate contaminant migration to groundwater (FY 1999).

Portsmouth Gaseous Diffusion Plant

- Completed multi layer cap (FY 1998) and design seep collection system to passive treatment (FY 1999) for the Peter Kiewit Landfill; completed X-735 Landfill cap and closure (FY 1998) and independent certification (FY 1999); and removed X-7725 Diesel underground storage tank and contaminated soil to prevent contaminant migration off-site and to the groundwater (FY 1998).
- Treated 51 m^3 of mixed low-level waste, 12 m^3 of low-level waste, and shipped 55 m^3 of mixed low-level waste for off-site disposal (FY 1998). Treat 41 m^3 of mixed low-level waste, 79 m^3 of low-level waste, and ship for off-site disposal 956 m^3 of mixed low-level waste and 2,146 m^3 of low-level waste (FY 1999).
- Initiated (FY 1998) and complete (FY 1999) Risk Reduction Actions for East Drainage Ditch, Big Run Creek, North Drainage Ditch, and Northeast Drainage Ditch and complete risk reduction actions for the X-701B Holding Pond area soils (FY 1999) to prevent contaminant migration off-site via surface water pathways.
- Complete design and initiate construction for shutdown of the X-622T Groundwater Treatment Facility to reduce out year cost of operation and maintenance (mortgage reduction) (FY 1999).
- Regulator approval of Corrective Measures Study Reports for the Quadrant I (X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility), Quadrant IV, and Quadrant II (X-701B Holding Pond area groundwater plumes) as required to meet Regulatory compliance milestones and enable corrective actions to be conducted in FY 2001 (FY 1999).
- At Portsmouth, complete transition from investigation and interim corrective measures of contaminated soil source areas which will lead to final corrective measures implementation of groundwater contamination (primarily Trichloroethylene) in FY 2002 and reduce legacy waste inventory (FY 2000).

Paducah Gaseous Diffusion Plant

- Federal Facility Agreement was signed and executed by DOE, Environmental Protection Agency, and State of Kentucky for integration strategy and establishing compliance milestones for Comprehensive Environmental Response Compensation and Liability Act/Resource Conservation and Recovery Act response actions (FY 1998).
- Completed Record of Decision and remedial action for nine release sites and approval for closure on 2 underground storage tanks (FY 1998); Record of Decision, remedial design and remedial construction for LASAGNA electro-osmosis technology in-situ remediation of the Former Cylinder Drop Test Area (FY 1999) to prevent the migration of contaminants from the source area to groundwater.
- Completed removal action at six polychlorinated biphenyl release sites, a waste oil tank release site, and an Oil Land Farm release site (FY 1998).

- Completed remedial investigation at the C-400 Chemical Cleaning Facility release sites, the C-747-C Oil Land Farm, the Former Cylinder Drop Test area, and the C-746-A Septic System; initiated remedial investigation at eight release sites (FY 1998) and complete remedial investigation at four release sites (FY 1999) to meet Federal Facility Agreement compliance milestones.
- Completed transfer of 15 fluorine cells and equipment to the Department of Defense for beneficial reuse (FY 1998).
- Shipped 188 m^3 of Resource Conservation and Recovery Act waste, 29 m^3 of Toxic Substances Control Act/Resource Conservation and Recovery Act liquid waste, and 133 m^3 of low level waste for off-site treatment and/or disposal; and completed Resource Conservation and Recovery Act closure of the C-746-R Storage Pad to reduce legacy waste inventory and waste storage footprint and meet Federal Facility Compliance Act Site Treatment Plan enforceable milestones (FY 1998).
- Ship for offsite disposal 63 m^3 of Resource Conservation and Recovery Act ash receivers, 333 m^3 of low level waste ash receivers, and approximately 1,000 polychlorinated biphenyl capacitors; complete recycling of current inventory of lead acid batteries; and complete treatment and disposal of 6.4 m^3 of pyrophoric uranium waste to reduce legacy waste inventory and waste storage footprint and meet Federal Facility Compliance Act Site Treatment Plan enforceable milestones (FY 1999).
- Complete engineering evaluation/cost analysis for removal and disposal of 51,000 tons of scrap metal and complete Vortec Vitrification Technology Demonstration Project environmental assessment and construction (FY 1999).
- Complete field and planning activities leading to a FY 2001 Record of Decision at Paducah for implementing the final remedial action of sources contributing to the existing Northeast and Northwest contaminated groundwater plumes; complete remedial action of LASAGNA™ electro-osmosis technology at the former Cylinder Drop Test Area; and reduce legacy waste inventory. Kentucky regulators are requesting total removal of a uranium burial area where DOE had proposed a presumptive remedy of capping and monitoring (FY 2000).

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	$ Change	% Change
OR-44301 / ETTP Remedial Action	27,181	114	13,491	13,377	11734.2%
OR-44302 / ETTP Process Equip D&D	18,474	47,500	62,500	15,000	31.6%
OR-44303 / ETTP D&D	33,908	27,786	29,622	1,836	6.6%
OR-44305 / ETTP Landlord - D&D Fund	5,226	29,627	16,455	-13,172	-44.5%
OR-45301 / Paducah Remedial Action	20,020	20,788	20,647	-141	-0.7%
OR-45302 / Paducah Waste Management . . .	19,562	15,195	16,853	1,658	10.9%
OR-46301 / Portsmouth Remedial Action	18,978	12,370	20,023	7,653	61.9%
OR-46302 / Portsmouth Waste Management	24,075	22,749	17,477	-5,272	-23.2%
OR-48303 / Off-site RA - D&D Fund	19,670	9,921	8,030	-1,891	-19.1%
OR-48304 / Directed Support	3,106	4,150	5,100	950	22.9%

Total, Oak Ridge	190,200	190,200	210,198	19,998	10.5%

Funding By Site

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	$ Change	% Change
Oak Ridge Reservation	84,789	105,027	122,068	17,041	16.2%
Oak Ridge Off-site	19,670	9,921	8,030	-1,891	-19.1%
Paducah	39,582	35,983	37,500	1,517	4.2%
Portsmouth	43,053	35,119	37,500	2,381	6.8%
Oak Ridge Operations Office	3,106	4,150	5,100	950	22.9%
Total, Oak Ridge	190,200	190,200	210,198	19,998	10.5%

Metrics Summary

	FY 1998	FY 1999	FY 2000
Remedial Actions/Release Sites			
Assessments	6.0	9.0	94.0
Cleanups	26.0	8.0	11.0
Facility Decommissioning			
Assessments	2.0	3.0	261.0
Cleanups	4.0	8.0	1.0
Transuranic Waste (m^3)			
Treatment	1.0	0.0	0.0
Storage	5.0	5.0	6.0
Mixed Low-Level Waste (m^3)			
Treatment	239.0	59.0	70.0
Storage	13,542.0	12,550.0	11,484.0
On-site Comm. Disposal	1,597.0	6,996.0	1,265.0
Shipped to DOE Disposal	133.0	1,032.0	116.0
Low-Level Waste (m^3)			
Treatment	41.0	86.0	68.0
Storage	115,758.0	113,642.0	113,067.0
On-site Comm. Disposal	2,066.0	779.0	1,192.0
Shipped to DOE Disposal	104.0	2,146.0	164.0
Hazardous Waste (MT)			
Commercial Waste	0.0	0.0	46.0

Site Description

Oak Ridge Operations Office

The Oak Ridge Operations Office manages, coordinates, tracks, and assists in the implementation of the Environmental Management program among the various sites. Oak Ridge leads the National Program for Metal Recycle, as well as crosscutting integration efforts related to the Oak Ridge sites. In addition, the Oak Ridge Operations Office manages oversight agreements with the States of Tennessee, Ohio, and Kentucky and provides funding for all off-site projects.

Oak Ridge Reservation

The Oak Ridge Reservation encompasses about 37,000 acres and is comprised of three facilities; the Y-12 Plant, which was a uranium processing facility and now dismantles nuclear weapons components and serves as the nation's storehouse for special nuclear materials; the East Tennessee Technology Park, which was a uranium enrichment facility and is now being transitioned through reindustrialization; and the Oak Ridge National Laboratory, which conducts applied and basic research in energy technologies and in the physical and life sciences. Only East Tennessee Technology Park is funded under the Uranium Enrichment D&D Fund.

East Tennessee Technology Park (formerly K-25)

The East Tennessee Technology Park is located on a 1,500 acre tract of land adjacent to the Clinch River, approximately 10 miles west of Oak Ridge, Tennessee. It was built as part of the World War II Manhattan Project and used to enrich uranium for national defense purposes. By the mid-1950s, five large uranium enrichment buildings covering 114 acres were in operation: K-25, K-27, K-29, K-31, and K-33. Four electrical switch yards and eight cooling towers served these buildings. Machinery was fabricated, serviced, repaired, and cleaned at on-site facilities. Enrichment of weapons-grade uranium ceased in 1964. The plant continued to produce low enriched uranium for commercial nuclear power purposes until 1985, when the plant was shut down.

Paducah

The Paducah Gaseous Diffusion Plant is located approximately 15 miles west of Paducah, Kentucky, near the Ohio River. Department property comprises nearly 3,500 acres; 750 acres are inside the site's security fence, and 2,000 acres are leased to the Kentucky Department of Fish and Wildlife. Plant process buildings cover 74 acres. Paducah began operations in 1952 to produce low-assay enriched uranium for use as commercial nuclear reactor fuel. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation in accordance with the Energy Policy Act of 1992.

Portsmouth

The Portsmouth Gaseous Diffusion Plant is located approximately 22 miles north of Portsmouth, Ohio. Construction of the 3,714 acre site began in 1952. Plant process buildings cover 93 acres. The mission of the plant was to increase the national production of enriched uranium and maintain the nation's superiority in the development and use of nuclear energy. Since 1991, the plant has produced only low-enriched uranium for commercial power plants. In 1993, uranium enrichment operations were turned over to the United States Enrichment Corporation in accordance with the Energy Policy Act of 1992.

Detailed Program Justification

(dollars in thousands)

FY 1998	FY 1999	FY 2000

The Oak Ridge Operations Office Environmental Management projects under the Uranium Enrichment Decontamination and Decommissioning Fund are managed by a Management and Integration contractor through incentivized contracts, with fixed-price subcontracts, to assure the most cost efficient service to the Government. The scope planned for FY 2000 has been reviewed and is appropriate to meet the goals of the site as outlined in the *Accelerating Cleanup: Paths to Closure*. Project Baselines for activities included in this section of the budget have had, or planned to have an independent cost review of the scope, and the funds requested for FY 2000 are appropriate to perform the activities based on a historical level of effort and fixed-price contracts. Regulatory drivers for cleanup are Federal Facility Agreements which integrate Comprehensive Environmental Response Compensation and Liability Act and Resource Conservation and Recovery Act requirements; Consent Orders issued by the State regulators for permitted hazardous waste units; Resource Conservation and Recovery Act Part B hazardous waste management permits; Toxic Substances Control Act regulations for management of polychlorinated biphenyls; and Federal Facility Compliance Agreements for management of legacy mixed waste. The agreements establish enforceable milestones for completing major activities at the sites consistent with site Baselines.

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
OR-44301/ETTP Remedial Action			
Carry out activities at the East Tennessee Technology Park watershed including removal of hazardous materials, treatment, and disposal of remediation waste, source control/elimination to preclude the additional spread of contamination and remediation of soils, groundwater, and building structures to industrial use standards and initiate long-term surveillance and maintenance.			
■ Complete and submit the Record of Decision for the East Tennessee Technology Park watershed to the regulators for approval.			
■ Begin excavation of K-1070-A Contaminated Burial Ground.			
■ Initiate the K-1070-C/D G-Pit and Concrete Pad remediation.			
■ Complete shipments of unstabilized pond waste sludge to Envirocare of Utah for treatment and disposal (1,167,000 kilograms will be shipped in FY 2000).			
OR-44301	27,181	114	13,491

Metrics			
Facility Decontamination and Decommissioning			
Assessments	0.0	1.0	5.0
Cleanups	0.0	6.0	1.0
Remedial Action/Release Sites			
Assessments	5.0	0.0	66.0
Cleanups	17.0	0.0	3.0
Mixed Low-Level Waste (MLLW)			
Disposal - DOE Onsite/Commercial (m^3)	1,438.0	0.0	1,167.0

OR-44302 East Tennessee Technology Park Process Equipment Decontamination and Decommissioning

This fixed price project involves the removal of process equipment and the decontamination of the contaminated equipment and building space from 3 of the 5 process buildings on the East Tennessee Technology Park site. The decontaminated buildings will be released for reindustrialization leasing upon completion. The decontaminated metals will be regulated, released, and recycled.

- Continue removal and decontamination of cascade equipment in the K-33 Process Building.

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ Initiate removal and decontamination of cascade equipment in the K-31 Process Building.			
OR-44302	18,474	47,500	62,500

Metrics			
Mixed Low-Level Waste (MLLW)			
Disposal - DOE Onsite/Commercial (m^3)	0.0	6,982.0	60.0

OR-44303/East Tennessee Technology Park Decontamination and Decommissioning

Decommissioning, demolition, and surveillance and maintenance of surplus buildings at the East Tennessee Technology Park (this activity does not include the 3 building decommissioning contract with BNFL, Inc.). Buildings that can be reused will be decontaminated and buildings that are not suitable for reuse, such as the original K-25 building, will be demolished. Surplus buildings and release sites in the East Tennessee Technology Park will be covered by the ongoing surveillance and maintenance program. (Split funded in the Defense Environmental Restoration and Waste Management appropriation, total FY 2000 funding $37,002,000.)

- Complete the Group 1 (5 buildings) Auxiliary Facilities Decommissioning/Demolition Project.
- Continue surveillance and maintenance for surplus buildings and release sites under federal control.
- Continue deactivation and decontamination of the decontamination building (1420 building).
- Continue deactivation of the original K-25 process building.
- Additional deactivation of ancillary buildings associated with K-25, K-27 and the main plant area.
- Various facility assessments will be completed.

OR-44303	33,908	27,786	29,622

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
Metrics			
Facility Decommissioning			
Assessments	2.0	2.0	256.0
Cleanups	4.0	2.0	0.0
Remedial Action/Release Sites			
Assessments	0.0	0.0	6.0
Cleanups	0.0	1.0	0.0

OR-44305/East Tennessee Technology Park Landlord Decontamination and Decommissioning

Conduct Landlord activities. These activities are conducted in accordance with the current project baseline for scope, schedule and cost, and are consistent with the Federal regulations and DOE Orders for Health and Safety, and maintenance. This account also includes infrastructure support activities that had been funded through overhead accounts prior to FY 1999. This activity is split funded by the Defense Environmental Restoration and Waste Management and the Uranium Enrichment Decontamination and Decommissioning Fund appropriations. (Total FY 2000 funding is $41,136,000.)

- Related subtasks will be completed for the East Tennessee Technology Park infrastructure used to support Environmental Management Program activities including: the East Tennessee Technology Park Electrical Distribution System Reconfiguration and selected bridge refurbishment.
- Design, construction, and planning associated with roof replacements and heating, ventilation, and air conditioning upgrades.
- Issues associated with engineering evaluations for security, classification, piping supports, and other equipment support.
- Infrastructure activities including safeguards and security, utilities, Environmental Safety and Health Program, reindustrialization support and fire protection.

OR-44305	5,226	29,627	16,455

Metrics
No quantifiable corporate performance measures are associated with this project.

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
OR-45301/Paducah Remedial Action			
Continue remedial action activities at the Paducah Gaseous Diffusion Plant to address hazardous/solid waste units and reduce the public risk due to extensive groundwater contamination (technicium, trichloroethylene). The cleanup approach is to address potential public risks through source control, plume mitigation, pre-decommissioning, and long-term surveillance and maintenance.			
■ Provide long term surveillance and maintenance of interim groundwater treatment systems, operation and maintenance of interim corrective measures and post-closure monitoring of remedial sites (closed landfills, drainage outfalls, etc); and maintain off-site water policy for affected residents.			
■ Provide decontamination and decommissioning surveillance and maintenance for the C-410 Feed Plant Complex and the C-340 Metals Reduction Plant Complex.			
■ Provide compliance groundwater monitoring well sampling (184 wells) and regulatory reporting.			
■ Conduct remedial investigations for mounds, berms, leak sites, and firing ranges located throughout the plant site; and address contamination within or near ditches, creeks, and a lagoon.			
■ Complete remedial action of LASAGNA™ electro-osmosis technology at the Former Cylinder Drop Test Area; complete record of decision for waste area group 22 uranium burial ground; and additional burial ground and burn area.			
■ Complete proposed plans and feasibility studies for the groundwater operable unit.			
OR-45301	20,020	20,788	20,647

Metrics			
Remedial Action/Release Site			
Assessments	1.0	4.0	6.0
Cleanups	9.0	3.0	1.0

(dollars in thousands)

FY 1998	FY 1999	FY 2000

OR-45302/Paducah Gaseous Diffusion Plant Waste Management

Continue reducing legacy waste inventory through off-site treatment and disposal and implementation of on-site Vortec Vitrification Technology; continue compliant storage activities and restoration-derived waste management; and provide waste management technical and landlord support.

- Complete construction of waste storage facilities (C-746-Q and C-733) fire protection upgrades to meet regulatory requirements.
- Begin operation of the Vortec Vitrification Technology Demonstration Project for treatment of legacy waste.
- Operate and maintain 41,300 square feet of Resource Conservation and Recovery Act, Toxic Substance Control Act, Low Level Waste, and Investigation Derived Waste storage facilities containing 4,900 m^3 of legacy waste; and maintain 26 acres of outside storage areas containing 87,800 m^3 of scrap metal (88% of legacy waste).
- Complete removal and disposal of 9,700 tons of scrap metal.
- Dispose of 1,000 capacitors contaminated with polychlorinated biphenyls off-site.
- Provide limited contract, program management, and support for remedial and waste management activities.

OR-45302	19,562	15,195	16,853

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
Metrics			
Transuranic Waste (TRU)			
Treatment (m^3)	1.0	0.0	0.0
Storage (m^3)	5.0	5.0	6.0
Mixed Low-Level Waste (MLLW)			
Treatment (m^3)	188.0	18.0	29.0
Storage (m^3)	4,176.0	4,102.0	3,992.0
Disposal - DOE Onsite/Commercial (m^3)	28.0	14.0	38.0
Disposal - Ship to DOE Disposal Site (m^3)	78.0	76.0	76.0
Low Level Waste (LLW)			
Treatment (m^3)	29.0	7.0	0.0
Storage (m^3)	99,004.0	99,193.0	98,918.0
Disposal - DOE Onsite/Commercial (m^3)	1,681.0	620.0	1,056.0
Disposal - Ship to DOE Disposal Site (m^3)	104.0	0.0	0.0
Hazardous Waste			
Commercial Waste (MT)	0.0	0.0	46.0

OR-46301/Portsmouth Gaseous Diffusion Plant Remedial Action

Complete transition from investigation and interim corrective measures of hazardous/solid waste units to cleanup of on-site groundwater contamination (primarily trichloroethylene) at the Portsmouth Gaseous Diffusion Plant. Groundwater cleanup will employ new technologies for trichloroethylene removal. Activities include closure of remaining Resource Conservation and Recovery Act hazardous waste units, containment and contaminant removal of on-site groundwater plumes, treatment or disposal of legacy waste, and pre-decommissioning and long-term surveillance and maintenance.

- Complete Corrective Measures Initiative design and initiate construction for X-749 Contaminated Materials Disposal Facility/X-120 Old Training Facility, X-744Y Bulk Storage Building/X-744G Storage Yard Soil, X-720 Neutralization Pit & soils, and the X-734 Old Sanitary Landfill groundwater plumes.
- Complete shutdown of the X-622T Groundwater Treatment Facility.

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
■ Complete Risk Reduction Action at the X-700 Chemical Cleaning Facility Chemical and Petroleum Storage Containment Tanks.			
■ Complete design for 5-Unit (X-231 Oil Biodegradation Plots) Groundwater Corrective Measures Initiative.			
■ Provide Decontamination and Decommissioning Surveillance and Maintenance at 5 facilities; Long Term Surveillance and Maintenance groundwater treatment systems; and post-closure monitoring of remediated sites.			
OR-46301	18,978	12,370	20,023

Metrics			
Remedial Action/Release Sites			
Assessments	0.0	5.0	16.0
Cleanups	0.0	4.0	7.0

OR-46302/Portsmouth Gaseous Diffusion Plant Waste Management

Continue reducing legacy waste inventory through off-site treatment and disposal; continue compliant storage activities and restoration-derived waste management; and provide waste management technical and directed support.

- Treat approximately 240,000 pounds of bulk Toxic Substances Control Act liquid stored on-site and approximately 91,000 pounds of mixed waste.
- Characterize 34 waste streams.
- Complete off-site disposal of 125 B-25 boxes of sludge from the X-701B Holding Pond, 600 B-25 boxes of X-616 Effluent Control Facility/Former Chromium Sludge Lagoon sludge disposal at the Hanford Reservation, and disposal of 30 55-gallon containers of Resource Conservation and Recovery Act (F006) listed waste from treatability study.

OR-46302	24,075	22,749	17,477

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
Metrics			
Mixed Low-Level Waste (MLLW)			
Treatment (m^3)	51.0	41.0	41.0
Storage (m^3)	9,366.0	8,448.0	7,492.0
Disposal - DOE Onsite/Commercial (m^3)	131.0	0.0	0.0
Disposal - Ship to DOE Disposal Site (m^3)	55.0	956.0	40.0
Low Level Waste (LLW)			
Treatment (m^3)	12.0	79.0	68.0
Storage (m^3)	16,754.0	14,449.0	14,149.0
Disposal - DOE Onsite/ Commercial (m^3)	385.0	159.0	136.0
Disposal - Ship to DOE Disposal Site (m^3)	0.0	2,146.0	164.0

OR-48303/Off-site Remedial Action Decontamination and Decommissioning Fund

Conduct cleanups, groundwater remediation, and provide technical support and conduct landlord activities. These activities are conducted in accordance with the current project baseline for scope, schedule and cost, and are consistent with the Federal regulations and DOE Orders for Health and Safety, and maintenance. The activities are consistent with the Federal Facilities Agreement milestones as agreed with the Environmental Protection Agency for activities under the comprehensive Environmental Response, Compensation, and Liability Act, and consistent with the milestones agreed with the State under the Tennessee Superfund Act. This activity is split funded with the Defense Environmental Restoration and Waste Management and Non-Defense Environmental Management appropriations. (Total FY 2000 funding is $23,839,000.)

- Activities include contract management support, environmental information management, release site evaluations and footprint reduction.

OR-48303	19,670	9,921	8,030

Metrics
No quantifiable corporate performance measures are associated with this project.

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
OR-48304/Directed Support			
This activity provides funding for Agreements-in-Principle and grants to support regulator reviews/oversight activities on Oak Ridge Operations Office Environmental Management projects. This activity is split funded between the Uranium Enrichment Decontamination and Decommissioning Fund, the Defense Environmental Restoration and Waste Management, and Non-Defense Environmental Management appropriations. (Total FY 2000 funding is $10,367,000.)			
■ Funding of Agreements in Principle with Kentucky and Tennessee.			
■ Funding for National Metal Recycle Center of Excellence.			
■ Other directed activities.			
OR-48304	3,106	4,150	5,100

Metrics
No quantifiable corporate performance measures are associated this project.

Total, Oak Ridge	190,200	190,200	210,198

Explanation of Funding Changes From FY 1999 to FY 2000

	FY 2000 vs. FY 1999 ($000)
OR-44301/ETTP Remedial Action	
■ Increase in FY 2000 required because the shipment of stabilized pond sludge to Envirocare of Utah was performed in FY 1999 using reprogrammed carryover funds. Additional increases to perform remediation of K1070 C/D Pond, the G Pit and the K1070-A Contaminated Burial Ground.	13,377
OR-44302/East Tennessee Technology Park Process Equipment Decontamination and Decommissioning	
■ FY 2000 is the first year reflecting full production decommissioning on the 3 building decommissioning contract (3 shifts per day).	15,000

	FY 2000 vs. FY 1999 ($000)
OR-44303/East Tennessee Technology Park Decontamination and Decommissioning	
■ Deactivation and decontamination work at the K-1420, and K-25 buildings and deactivation work on numerous ancillary facilities has increased.	1,836
OR-44305/East Tennessee Technology Park/Landlord - Decontamination and Decommissioning Fund	
■ This reduction reflects infrastructure costs realized through reindustrialization and management and integration contractor initiatives.	-13,172
OR-45301/Paducah Remedial Action	
■ No significant change.	-141
OR-45302/Paducah Waste Management	
■ Ship additional 500 m^3 of Low-Level Waste for offsite disposal.	1,658
OR-46301/Portsmouth Remedial Action	
■ Increase reflects transition from assessment to actual cleanup of groundwater.	7,653
OR-46302/Portsmouth Waste Management	
■ Decrease reflects one-year delay of Mixed Low-Level Waste treatment.	-5,272
OR-48303/Off-site Remedial Action - Decontamination and Decommissioning Fund	
■ Decrease reflects completion of some worker transition activities in FY 1999 and a change in allocation between appropriations.	-1,891
OR-48304/Directed Support	
■ This increase is partially due to additional funding for the National Metal Recycle Center of Excellence and increases in other directed activities.	950
Total Funding Change, Oak Ridge	19,998

Major Issues

The explanation of change reflects the Uranium Enrichment Decontamination and Decommissioning Fund increasing by $19,998,000 from FY 1999 to FY 2000. Because of a one time “credit” of $15,500,000 from the Uranium Enrichment Corporation in late FY 1998 which carried over for use in FY 1999, a total of $205,700,000 was actually available for FY 1999 activities. However, because this “credit” cannot be reflected as budget authority, the growth from FY 1999 ($190,200,000) to FY 2000 ($210,198,000) creates the appearance of a much larger increase.

This credit was associated with a higher than expected quantity of low enriched uranium that the Uranium Enrichment Corporation was able to derive form the dilution of highly enriched uranium transferred by the Department.

Multi-Site

Mission Supporting Goals and Objectives

Program Mission

The Uranium Enrichment Decontamination and Decommissioning Fund supports partial payment of Uranium/Thorium licensee claims, as required under Title X, Subtitle A of the Energy Policy Act of 1992. The Act directs that the Fund be used to reimburse operating uranium or thorium processing site licensees for the costs of their environmental cleanup at those sites, subject to a specific reimbursement limit. This payment is to cover the Federal Government's share of cleanup being carried out at specific active uranium and thorium processing sites. The Department compensates site owners on a per-ton basis for the restoration costs for those tailings attributable to the Federal Government. Due to overall priorities within the Uranium Enrichment Decontamination and Decommissioning Fund (i.e. compliance activities, high priority cleanup actions, etc.), the funding requested only covers a portion of the claims.

Program Goal

To ensure the Federal Government compensates the Uranium/Thorium licensees for the Federal Government's portion of cleanup costs at their sites.

Program Objective

The Uranium and Thorium Reimbursements will be distributed in the spring of 2000 based on approved unpaid claims submitted through FY 1999. Reimbursements will be based on the review and audits of claims submitted by 13 uranium licensees and one thorium licensee.

Performance Measures

Performance measures are provided at an aggregate level after the Funding by Site table as well as at a project level in the Detailed Program Justification.

Significant Accomplishments and Program Shifts

Provide for partial payment of approved Uranium/Thorium (Title X) claims (FY 1998/FY 1999/FY 2000).

Funding Schedule

(dollars in thousands)

	FY 1998	FY 1999	FY 2000	$ Change	% Change
HQ-4000 / Reimbursements to Uranium and Thorium Licensees under Title X of the Energy Policy Act of 1992	40,000	30,000	30,000	0	>999.9%
Total, UE D&D	40,000	30,000	30,000	0	>999.9%

Detailed Program Justification

(dollars in thousands)

	FY 1998	FY 1999	FY 2000
HQ-4000/Reimbursements to Uranium and Thorium Licensees under Title X of the Energy Policy Act of 1992			
The project reimburses the operating uranium or thorium processing site licensees for a portion (the Federal material determined to be at each site) of their costs of cleanup.			
■ Provide for partial payment of approved Uranium/Thorium licensee claims for cleanup conducted.			
HQ-4000	40,000	30,000	30,000
Metrics No quantifiable corporate performance measures are associated with this project.			
Total Multi-Site UE D&D	40,000	30,000	30,000