SECTION 4. ENVIRONMENTAL RESPONSIBILITY

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Environment					
Environmental Management	6,589,532	5,828,038	5,655,351	-172,687	-3.0%
Civilian Radioactive Waste Management	495,000	544,500	494,500	-50,000	-9.2%
Office of Legacy Management	77,812	200,990	194,167	-6,823	-3.4%
Total, Environment	**7,162,344**	**6,573,528**	**6,344,018**	**-229,510**	**-3.5%**

Environmental Responsibility Strategic Theme: Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production

Goal 4.1 Environmental Cleanup – Complete cleanup of the contaminated nuclear weapons manufacturing and testing sites across the United States

Goal 4.2 Managing the Legacy – Manage the Department's post-closure environmental responsibilities and ensure the future protection of human health and the environment

Environmental Management

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Environmental Management					
Defense environmental cleanup	6,129,729	5,390,312	5,363,905	-26,407	-0.5%
Non-Defense environmental cleanup	349,687	310,358	180,937	-129,421	-41.7%
Uranium enrichment D&D fund	556,606	579,368	573,509	-5,859	-1.0%
Subtotal, Environmental	7,036,022	6,280,038	6,118,351	-161,687	-2.6%
Uranium enrichment D&D fund discretionary payments	-446,490	-452,000	-463,000	-11,000	-2.4%
Total, Environmental Management	**6,589,532**	**5,828,038**	**5,655,351**	**-172,687**	**-3.0%**

PROGRAM DESCRIPTION

The **Environmental Management** (EM) program was created in 1989 to manage safely the cleanup of the environmental legacy from 50 years of nuclear weapons production and government-sponsored nuclear energy research at sites around the country. The program manages the remediation of sites contaminated by defense and civilian activities and receives appropriations in separate defense and non-defense accounts. The EM program has been working to focus the program on risk reduction rather than risk management and complete cleanup more efficiently and cost effectively. To continue progress, DOE is **requesting** a total of **$5.66 billion** in **FY 2008**.

EM is requesting program funds in three appropriation accounts: **Defense Environmental Cleanup** (FY 2007 $5.39 billion; FY 2008 $5.36 billion); **Non-Defense Environmental Completion** (FY 2007 $310.4 million; FY 2008 $180.9 million); and **Uranium Enrichment Decontamination and Decommissioning Fund** (FY 2007 $579.4 million; FY 2008 $573.5 million).

PROGRAM HIGHLIGHTS

The FY 2008 budget request totals $5.66 billion, a decrease of $173 million from the FY 2007 request. The FY 2008 request places priority on activities with the greatest risk reduction, while continuing the Department's commitment to the highest level of safety performance. The priorities reflected in this request are important not only to the success of the cleanup program, but to the communities and states in which the sites are located. The FY 2008 request continues progress toward cleaning up and closing sites, and reflects the following priorities: requisite safety, security, and services at all sites; the safe storage and treatment, disposition of radioactive tank waste; the storage, receipt, and remediation of spent nuclear fuel; the storage, processing and disposition of special nuclear materials; the treatment, storage and disposal of transuranic and low-level waste; the remediation of high-priority groundwater and soil contamination; and the decontamination and decommission of excess contaminated facilities.

Defense Environmental Cleanup

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Defense Environmental Cleanup					
Closure sites	1,077,806	320,937	42,437	-278,500	-86.8%
Hanford site	772,873	804,716	877,080	+72,364	+9.0%
Office of River Protection	848,334	964,127	963,443	-684	-0.1%
Idaho National Laboratory	532,862	512,604	504,026	-8,578	-1.7%
NNSA sites and Nevada off-sites	299,447	232,068	271,130	+39,062	+16.8%
Oak Ridge Reservation	254,790	159,862	179,284	+19,422	+12.1%
Savannah River site	1,270,973	1,084,394	1,206,090	+121,696	+11.2%
Waste Isolation Pilot Plant	228,331	213,278	219,739	+6,461	+3.0%
Program direction	241,386	291,216	309,760	+18,544	+6.4%
Program support	32,519	37,881	33,146	-4,735	-12.5%
Safeguards and Security	281,189	295,840	273,381	-22,459	-7.6%
Technology development	29,047	21,389	21,389	——	——
Uranium enrichment D&D fund contribution	446,490	452,000	463,000	+11,000	+2.4%
Subtotal, Defense environmental cleanup	6,316,047	5,390,312	5,363,905	-26,407	-0.5%
Use of prior year balances and other adjustments	-186,318	——	——	——	——
Total, Defense Environmental Cleanup	**6,129,729**	**5,390,312**	**5,363,905**	**-26,407**	**-0.5%**

PROGRAM DESCRIPTION

The **FY 2008 request** for the **Defense Environmental Cleanup** appropriation is **$5.4 billion**. This appropriation supports the largest portion of the Environmental Management mission, with the goal of completing cleanup of the defense weapons research and production legacy. Upon completion, sites or portions of sites will be turned over to other DOE program landlords or to the Office of Legacy Management program for long-term surveillance and maintenance. Defense Environmental Cleanup provides funding in accounts that are generally organized by site or location, such as the Savannah River Site. It also includes funding for Safeguards and Security, Technology Development and Deployment, Program Support, and Program Direction. This appropriation includes funding for projects at the Idaho National Laboratory, Oak Ridge Reservation, Defense Closure sites (Fernald, Miamisburg, Ashtabula, Columbus and Rocky Flats, and post-closure administration activities), the Hanford Site, the Savannah River Site, the Waste Isolation Pilot Plant (WIPP), and legacy cleanup at National Nuclear Security Administration (NNSA) sites.

SIGNIFICANT FUNDING CHANGES – FY 2007 to FY 2008 Request ($ in millions)

Closure Sites (FY 2007 $320.9, FY 2008 $42.4)..... -$278.5
Request supports cleanup, closure and post-closure activities at the **Ashtabula, Fernald and Miamisburg (Mound) sites in Ohio, and Rocky Flats in Colorado**. The decrease in this account reflects completed cleanup at Fernald in FY 2007. While responsibility for post-closure administration at Rocky Flats, Fernald, and Columbus, including long-term stewardship of the remedy, contractor post-retirement benefits (e.g., pensions, medical benefits, life insurance), and records management transferred to the Office of Legacy Management in FY 2007, the FY 2008 request provides for ongoing litigation liabilities, contract closeout, and regulatory completion activities at completed sites that are managed by the Consolidated Business Center ($11.8). Request also supports post-closure activities at Miamisburg including post-retirement pensions and benefits and long-term stewardship in anticipation of the eventual transfer to the Office of Legacy Management ($30.3). Cleanup of Operable Unit 1, the last remaining cleanup activity at the Mound site will be completed in 2007.

Hanford Site (Richland) (FY 2007 $804.7; FY 2008 $877.1).....+$72.4
Richland Operations Office manages Hanford site cleanup activities associated with the production of nuclear materials during the Cold War, including soil and groundwater remediation, facility decontamination and decommissioning (D&D), stabilization and disposition of nuclear materials and spent nuclear fuel, and waste disposition for wastes other than high-level waste, which is managed by the Office of River Protection. Defense-related Hanford activities are funded in two control points: 2012 Completion Projects ($413.0) and 2035 Completion Projects ($464.0).

The request provides an increase for spent nuclear fuel activities at **K Basins** to support increased D&D activities at K-East Basin and construction of sludge treatment systems, offset by a ramp-down in sludge containerized activities which will be completed in 2008 (+$18.7). There are also increases for the **Plutonium Finishing Plant Complex** for de-inventory of special nuclear material, pending consolidation decision (+$16.4); and groundwater/vadose zone remediation to expand remediation systems and install a new treatment system to prevent plumes from reaching the Columbia River (+$29.6). The **River Corridor Closure project** for D&D of facilities and remediation of chemical and radioactive contaminants in soils and groundwater along the Columbia River is funded at $215.2 million, a small decrease (-$5.8) that reflects increased remediation in 100, 300 and 600 areas, offset by decreases in facility demolition in 300 area. The request provides for ongoing waste management and disposition, including increased mixed-waste treatment activities and the start of conceptual design for the remote-handled TRU waste processing capability. The request continues operations at Environmental Restoration Disposal Facility.

Office of River Protection (FY 2007 $964.1; FY 2008 $963.4).....-$0.7
Office of River Protection's primary goal is the safe management and treatment of approximately 53 million gallons of high-level radioactive liquid waste in the 177 underground storage tanks at Hanford. Funding for River Protection activities is funded in two control points: the Waste Treatment and Immobilization Project ($690) and Tank Farm Activities ($273.4).

The **Waste Treatment and Immobilization Plant** (WTP) has experienced significant technical and project management issues that impact the cost and schedule of the project. The Department slowed the project to address these problems and undertook a series of aggressive actions to thoroughly review the key elements of the project. The Department has put aggressive oversight, management and project controls in place and, in December 2006, established a credible, new validated cost and schedule baseline for the project. As of the end of FY 2006, design of the project was approximately 78 percent complete, and construction was 29 percent complete.

The FY 2008 request supports continued design and ongoing construction on the Low-Activity Waste Facility ($100); Analytical Laboratory ($40); and Balance of Facilities ($85). It also provides for the restart of construction of the High-Level Waste Facility ($189) and Pretreatment Facility ($276), on the critical path for completion of the plant, which was suspended while seismic and other technical issues were addressed.

Office of River Protection also manages the stabilization of approximately 53 million gallons of high-level radioactive waste stored in 177 underground tanks at Hanford; develops waste retrieval and transfer systems to support disposition of the waste; and carries out interim closure of tanks. FY 2008 request maintains the tank farm in a safe and compliant manner, continues operation of the 222-S Laboratory and the 242-A Evaporator, and continues Single Shell Tank retrievals on a pace that supports the Waste Treatment Plant schedule. The request is essentially level with FY 2007.

Idaho National Laboratory (FY 2007 $512.6; FY 2008 $504.0) .....-$8.6
FY 2008 request continues the safe management and disposition of high-level radioactive waste, transuranic waste and spent nuclear fuel, as well as remediation activities and the disposal of on-site mixed low-level, hazardous, and other wastes. Continues operations of the **Advanced Mixed Waste Treatment Facility** and shipments of waste to the Waste Isolation Pilot Plant, including remote-handled transuranic waste. An increase of $81.8 million reflects the ramp up of construction of the **Sodium Bearing Waste Treatment Facility**. Request includes an increase for spent nuclear fuel management for Foreign Research Reactor receipts and Naval Spent Fuel transfers. Decrease for waste management activities reflects a reduction of site waste disposition activities for legacy and newly generated low-level, mixed low-level, and hazardous wastes due to other higher priorities. Decreases for D&D activities are due to early completions at Test Area North-607 and other projects, as well as deferred non-nuclear D&D activities to support higher priority compliance activities. Request continues removal operations of targeted **buried waste** at the Radioactive Waste Management Complex.

NNSA Sites (FY 2007 $232.1; FY 2008 $271.1) .....+$39.0
Request provides for cleanup of the legacy of environmental contamination and waste at National Nuclear Security Administration (NNSA) sites. Included are **Lawrence Livermore National Laboratory-Site 300** ($8.7), **Los Alamos National Laboratory** ($139.5), **Nevada Test Site** ($81.1), **Pantex** ($12.4), and **Separations Process Research Unit** ($27.6), as well as community support activities.

The increase for **Los Alamos National Laboratory** (+$48.9) reflects performance improvements and establishment of a sound baseline by the new contractor, resulting in a restoration of funding to the FY 2006 level. Increase support remediation activities to meet Consent Order milestones. Request does not provide funding for D&D activities at facilities in Technical Area-21 in order to fund higher compliance priorities.

The request for **Nevada Test Site** (+$1.4) supports operation of the low-level waste disposal facility, and ongoing characterization and remediation activities. It includes increase to fund the low-level waste disposal facility in the Nevada budget, previously partially funded in site budgets. This is offset by decreases due to completion of transuranic waste shipments to WIPP in FY 2007, and a shift in subsurface contamination efforts from field characterization to data analysis and model development.

Decreases in the FY 2008 request for **Pantex** (-$11.3) and **Lawrence Livermore National Lab** (-$2.9) reflect a ramp-down toward site completion in FY 2008 as remediation, D&D, and waste disposition projects are completed. The increase for **Separations Process Research Unit** (+$3.1) continues active cleanup at the site.

Oak Ridge Reservation (FY 2007 $159.9; FY 2008 $179.3).....+$19.4
FY 2008 request supports treatment and disposal of defense-funded decommissioning, legacy waste management activities, including operation of the **Toxic Substances Control Act (TSCA) Incinerator,** processing of contact-and remote-handled waste at the **Transuranic Waste Treatment Facility**; and remediation activities at the **Oak Ridge Reservation**, which includes Oak Ridge National Laboratory, Y-12 Plant, East Tennessee Technology Park (ETTP) and several offsite locations. Additional funding supports increased unit costs for processing transuranic waste at the Transuranic Waste Processing Facility for shipment to WIPP. It also supports progress towards down-blending and disposition of uranium-233 in **Building 3019** (+$20) through the finalization of design and the start of long-lead procurement activities.

Savannah River (FY 2007 $1,084.4; FY 2008 $1,206.1) ..... +$121.7
Savannah River Site is responsible for stabilization, treatment and disposition of legacy nuclear materials and wastes, spent nuclear fuels, and remediation of contaminated media resulting from

nuclear materials produced during the Cold War. Funding for Savannah River activities is funded in three control points: 2012 Completion Projects ($31.0), 2035 Completion Projects ($510.1) and Tank Farm Activities ($665.0).

The FY 2008 request supports management and stabilization of "at risk" spent nuclear fuel and nuclear materials. It continues operations in the **H Canyon/H-B** Line to process legacy materials and aluminum-clad spent nuclear fuel and support NNSA-funded efforts to blend highly enriched uranium to low enriched uranium. The F-Canyon complex will be maintained in a minimum surveillance and monitoring condition.

The FY 2008 request continues storage and surveillance of stabilized nuclear materials in the **K-Area Material Storage** facilities, key to the Department's efforts to consolidate nuclear materials across the complex. Pending a consolidation decision, it supports receipt of nuclear materials from off-site. It includes $31 million for continued construction of a 3013 Container Surveillance Capability in Building 105-K. The request also includes $15 million to begin preliminary design of the plutonium vitrification disposition project to provide capability to disposition plutonium without an identified disposition path.

The request continues progress in the management and disposition of high-level waste. It supports vitrification of high-level tank waste at the **Defense Waste Processing Facility** (186 canisters in FY 2008). It also includes $10 million to continue design to address seismic and other technical issues and $131 million to ramp up construction of the **Salt Waste Processing Facility**. The request continues safe maintenance of the high-level waste tanks and supports waste removal activities in a number of tanks, including closing two tanks.

The site continues other important mission management and disposition of all waste types, including transuranic waste shipped to the Waste Isolation Pilot Plant for disposal, and cleanup of contaminated soil and groundwater in accordance with compliance agreements.

The increase for the Savannah River Site primarily reflects increased bulk waste removal activities from the tanks, increases for Salt Waste Processing Facility construction, and the start of preliminary design completion of plutonium vitrification disposition capability. These are offset by reduced number of drummed TRU waste shipments to the Waste Isolation Pilot Plant and waste stream volume reductions, and completion of several high-cost remediation projects.

Waste Isolation Pilot Plant (FY 2007 $213.3; FY 2008 $219.7) .....+$6.4
Funding supports the National Transuranic Waste Program, managed by Carlsbad Field Office, including the operation of the **Waste Isolation Pilot Plant** (WIPP), the national repository for defense-generated transuranic waste, near Carlsbad, New Mexico. Funding supports 21 shipments of contact-handled and ramp up to 6 shipments of remote-handled waste per week. Increase reflects additional activities at the generator sites to support remote-handled waste shipments. This is offset by completion of procurement of remote-handled trailers.

Program Direction (FY 2007 $291.2; FY 2008 $309.8).....+$18.6
Request supports the federal workforce responsible for the overall direction and administrative support of the EM program, including both headquarters and field personnel. It provides funding for salaries, benefits, travel, training, support services, and other related expenses for 1,500 FTEs; 1,051 of these FTEs are located in field offices, 299 in Headquarters, and 150 FTEs are assigned to the EM Consolidated Business Center Program. Includes 8 FTEs associated with the Central Technical Authority that provides nuclear safety oversight for the Department. Increase reflects increased personnel costs, increased requirements for technical support associated with activities such as seismic

evaluations and independent program reviews, and the transfer of 5 FTEs as part of a Departmental restructuring that established the Office of Health, Safety and Security.

Program Support (FY 2007 $37.9; FY 2008 $33.1) .....-$4.8
FY 2008 request supports continued policy, management, and technical support of the EM program, including efforts to accomplish workforce planning; conduct crosscutting program analysis; and provide a central information database for the program. Decrease reflects reduction in Defense Contracts Audit Agency requirements and completion of the Environmental Impact Statement for disposal of Greater-Than-Class-C waste in FY 2008.

Safeguards and Security (FY 2007 $295.8; FY 2008 $273.4).....-$22.4
Request ensures appropriate levels of protection for EM facilities and cleanup sites. FY 2008 request provides for protection of DOE security concerns, anticipates evolving threats, and maintains a balance of the security mission with the operation of the Waste Isolation Pilot Plant, East Tennessee Technology Park, Fernald, West Valley, Paducah, Portsmouth, Hanford, and Savannah River sites. Decrease reflects implementation of Design Basis Threat Requirements at Savannah River Site as well as completion of security upgrades at other sites. In addition, there will be sufficient carryover to meet all FY 2008 requirements at the Paducah site, so no additional budget authority is needed. These decreases are partially offset by an increase to begin security upgrades at the Canister Storage Building and support offsite nuclear material shipments at Richland.

Technology Development and Deployment (FY 2007 $21.4; FY 2008 $21.4)..... $0
Provides technical solutions and alternative technologies to enable accelerated cleanup. Areas of investment are critical high-return activities. The goals of the Technology Development and Deployment program are to eliminate technical barriers to cleanup by addressing technology needs identified by the sites and provide technical assistance to the sites. The program is composed of critical, high-risk, high-payback activities where significant improvement can be gained. Request maintains level funding for the program.

D&D Fund Deposit (FY 2007 $452.0; FY 2008 $463.0) .....+$11.0
Provides EM program's contribution to the Uranium Enrichment Decontamination and Decommissioning Fund. The increase reflects the government commitment to meet the government contribution required by the Energy Policy Act of 1992.

Non-Defense Environmental Cleanup

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Non-Defense Environmental Cleanup					
West Valley demonstration project	76,329	73,400	54,395	-19,005	-25.9%
Gaseous diffusion plants	48,325	74,860	38,120	-36,740	-49.1%
Depleted uranium hexafluoride conversion, 02-U-101	84,945	32,556	——	-32,556	-100.0%
Fast flux test reactor facility (WA)	45,652	34,843	10,342	-24,501	-70.3%
Small sites	94,436	94,699	78,080	-16,619	-17.5%
Total, Non-Defense Environmental Cleanup	**349,687**	**310,358**	**180,937**	**-129,421**	**-41.7%**

PROGRAM DESCRIPTION

The **FY 2008 request** for the **Non-Defense Environmental Cleanup** appropriation is **$180.9 million**. This appropriation supports activities that manage and address the environmental legacy resulting from civilian nuclear energy research. The nuclear energy research and development of the Department and its predecessor agencies generated waste and contamination that pose unique problems, including large quantities of contaminated soil and groundwater and a number of contaminated structures. Upon completion of cleanup activities, these sites or portions of a site will be turned over to other DOE program landlords or to the Office of Legacy Management for long-term surveillance and maintenance.

Non-Defense Environmental Cleanup provides funding in several accounts: Fast Flux Test Reactor Facility, Gaseous Diffusion Plants, Small Sites, and the West Valley Demonstration Project. Funding for the Small Sites account includes projects at Argonne National Laboratory, Brookhaven National Laboratory, the Energy Technology Engineering Center (ETEC), Idaho National Laboratory, the Inhalation Toxicology Laboratory, Los Alamos National Laboratory, Moab, and the Stanford Linear Accelerator Center.

SIGNIFICANT FUNDING CHANGES – FY 2007 to FY 2008 Request ($ in millions)

West Valley Demonstration Project (FY 2007 $73.4; FY 2008 $54.4) .....-$19.0
This account funds solid waste stabilization and disposition, and nuclear facility decontamination and decommissioning activities at West Valley, New York. FY 2008 funding supports continued facility decommissioning activities as well as the processing of transuranic (TRU) and high-activity wastes through the **Remote-Handled Waste Facility**, and shipments of waste off-site. Decrease is due to reduction in costs for the Environmental Impact Statement for Long-Term Stewardship and completion of the demolition of the 01/14 Building and other related facilities in FY 2007, as well as reduction in low-level waste shipments from the Drum Cell.

Gaseous Diffusion Plants (FY 2007 $107.4; FY 2008 $38.1) .....-$69.3
EM program manages the maintenance and storage of depleted uranium hexafluoride cylinders and other uranium activities at the gaseous diffusion plants at Paducah, Kentucky, and Portsmouth, Ohio. Activities supported include maintenance of facilities and inventories and pre-existing liabilities.

Paducah (FY 2007 $35.2; FY 2008 $17.4).....-$17.8
Paducah Gaseous Diffusion Plant began operation in 1952 to produce low-assay enriched uranium for use as commercial nuclear reactor fuel. In 1993, uranium enrichment operations were leased to the U.S. Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. FY 2008 request supports

management, maintenance, and storage of uranium hexafluoride cylinders awaiting conversion. Decrease in funding reflects completion of construction of the **Depleted Uranium Hexafluoride Conversion Facility**, projected to come on line in FY 2008.

Portsmouth (FY 2007 $72.2; FY 2008 $20.8).....-$51.5
Portsmouth Gaseous Diffusion Plant began operation in 1952. In 1993, uranium enrichment operations were leased to the U.S. Enrichment Corporation (USEC) in accordance with the Energy Policy Act of 1992. DOE decided in March 2001 to place the Portsmouth Gaseous Diffusion Plant in cold standby after USEC ceased the production of enriched uranium at the plant. FY 2008 request continues the storage and maintenance of uranium hexafluoride cylinders awaiting conversion. The reduced funding request reflects completion of construction of a **Depleted Uranium Hexafluoride (DUF6) Conversion Facility** (-$16.3) and the completion of decontamination and decommissioning of the **Gaseous Centrifuge Enrichment Plant** (-$20) to support the USEC **Advanced Centrifuge Facility** to be sited at Portsmouth.

Fast Flux Test Reactor Facility (FY 2007 $34.8; 2008 $10.3) .....-$-24.5
This account funds the deactivation and decommissioning of the Fast Flux Test Facility at the Hanford site. A record of decision issued in January 2001 established that the Fast Flux Test Facility would be permanently deactivated, and a subsequent decision by the Secretary of Energy was made to permanently close the facility. The Department later decided to defer substantial D&D activities to focus site resources on other risk cleanup priorities. FY 2008 request supports continued activities long-term surveillance and maintenance of the facilities and transport of sodium bonded fuel to Idaho National Laboratory for disposition. Decrease reflects the decision to defer D&D activities.

Small Sites (FY 2007 $94.7; FY 2008 $78.1).....-$16.6
Activities include cleanup and decontamination and decommissioning activities at small non-defense sites and projects at **Argonne National Laboratory, Brookhaven National Laboratory**, **Energy Technology Engineering Center (ETEC),** the **Inhalation Toxicology Laboratory**, **Los Alamos National Laboratory**, **Moab site**, and the **Stanford Linear Accelerator Center**. This account also includes non-defense spent nuclear fuel operations funded through the **Idaho National Laboratory**. Significant changes in site funding include:

Argonne National Laboratory (FY 2007 $10.7; FY 2008 $2.4) .....-$8.3
FY 2008 request funds long-term response actions and long-term stewardship activities as well as decommissioning of excess facilities. FY 2008 request will fund continued decommissioning of the 301 Hot Cell.

Brookhaven National Laboratory (FY 2007 $28.3; FY 2008 $23.7).....-$4.6
Primarily funds decontamination and decommissioning activities for the **Graphite Research Reactor** and the **High Flux Beam Reactor**. FY 2008 request accommodates bio-shield removal activities at the Graphite Reactor and continues decontamination and decommissioning activities at the High Flux Beam Reactor. Decrease reflects sequencing of work at the Graphite Reactor.

Idaho National Laboratory (FY 2008 $7.0; FY 2008 $5.4) .....-$1.6
FY 2008 request continues to maintain non-defense fuels stored on site at the Idaho National Laboratory including fuel from **Three Mile Island-2** and fuels stored **at Fort St. Vrain** in Colorado. Decrease in funding reflects completion of the five-year aging study.

Inhalation Toxicology Laboratory (FY 2007 $2.9; FY 2008 $0.4).....-$2.5
FY 2008 request supports completion of the project to free up laboratory space for alternate uses by the end of the fiscal year.

Energy Technology Engineering Center (FY 2007 $16.0; FY 2008 $13.0).....-$3.0
Request continues decontamination and decommissioning activities and off-site disposal of wastes from ETEC. Decrease reflects completion of Building 4024.

Los Alamos National Laboratory (FY 2007 $1.0; FY 2008 $1.9).....+$0.9
FY 2008 request funds surveillance and maintenance at the Tritium System Test Facility and characterization activities in support of decontamination and decommissioning contract for the facility in FY 2009.

Moab Site (FY 2007 $22.9; FY 2008 $24.0).....+$1.1
This project funds remediation of the former Atlas Mineral Corporation, Uranium Ore Processing and Mill Site at Moab, Utah. The Environmental Impact Statement Record of Decision, signed in September 2005, determined that the site would be cleaned up to pre-mill conditions with institutional controls to protect human health and the environment. FY 2008 activities include railroad upgrades and rail spur construction, disposal cell excavation, and design of groundwater remediation measures.

Stanford Linear Accelerator Center (FY 2007 $5.7; FY 2008 $5.9).....+$0.2
This project addresses chemical contamination of soil and groundwater from decades of physics research operations at the site. FY 2008 funding supports completion of the dual phase extraction system to address groundwater contamination.

Uranium Enrichment Decontamination and Decommissioning Fund

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Uranium Enrichment Decontamination and Decommissioning Fund					
Decontamination and decommissioning	536,806	559,368	553,509	-5,859	-1.0%
Uranium/thorium reimbursement	19,800	20,000	20,000	——	——
Total, Uranium Enrichment D&D Fund	**556,606**	**579,368**	**573,509**	**-5,859**	**-1.0%**

PROGRAM DESCRIPTION

The Energy Policy Act of 1992 established the **Uranium Enrichment Decontamination and Decommissioning Fund** (UED&D Fund) to carry out environmental management responsibilities at the nation's three gaseous diffusion plants. These responsibilities include decontamination and decommissioning, remedial actions, waste management, landlord requirements, surveillance, and operation and maintenance activities associated with conditions at the plants prior to the presence of the U.S. Enrichment Corporation. The UED&D Fund receives receipts from commercial utilities based on their historic purchases of uranium enrichment services, measured in separative work units. The remainder of the annual deposit to the UED&D Fund is made by DOE and is authorized to come from annual appropriations. The law also requires DOE to develop and administer a reimbursement program for remediation activities at active uranium and thorium processing sites that sold material to the U.S. government. The request for UED&D Fund activities for **FY 2008** is **$573.5 million**.

SIGNIFICANT FUNDING CHANGES – FY 2007 to FY 2008 Request ($ in millions)

Decontamination and Decommissioning
(FY 2007 $559.4; FY 2008 $553.5).....-$5.9
Office of Environmental Management manages the maintenance, decontamination, decommissioning, and remediation of uranium processing facilities and the gaseous diffusion plants at Paducah, Kentucky; Portsmouth, Ohio; and the East Tennessee Technology Park in Oak Ridge, Tennessee.

Oak Ridge East Tennessee Technology Park (ETTP) (formerly K-25)
(FY 2007 $311.5; FY 2008 $230.4).....-$81.1
ETTP was built as part of the World War II Manhattan Project and was used to enrich uranium for national defense purposes. Enrichment of weapons-grade uranium ceased in 1964. The plant continued to produce low-enriched uranium for commercial nuclear power purposes until 1985, when it was shut down. FY 2008 request supports continued decontamination and decommissioning activities for **K-25** and **K-27**, completion of excess material removal, demolition work at K-25 and K-27, continued Zone 1 remedial actions, and continued surveillance and maintenance. Decrease is consistent with work plans to complete the site by 2010.

Paducah (FY 2007 $96.6; FY 2008 $116.7).....+$20.1
Paducah Gaseous Diffusion Plant began operation in 1952 to produce low-assay enriched uranium for use as commercial nuclear reactor fuel. In 1993, uranium enrichment operations were leased to the U.S. Enrichment Corporation in accordance with the Energy Policy Act of 1992. FY 2008 request continues treatment of groundwater associated with building C-400, which is contaminated with

dense non-aqueous phase liquids (DNAPLs); continues characterization and disposition activities of **DOE Material Storage Areas**; and continues decontamination and decommissioning of the **C-410 Complex**. Increase reflects ramp up consistent with effort required to meet the Agreed Order and Consent Decree.

Portsmouth (FY 2007 $151.3; FY 2008 $206.4) ..... +$55.1
Portsmouth Gaseous Diffusion Plant began operation in 1952. In 1993, uranium enrichment operations were leased to the U.S. Enrichment Corporation in accordance with the Energy Policy Act of 1992. FY 2008 request supports continued disposal of low-level waste from stored converter shells, continued X-701B oxidation treatment activities and award of a new contract to conduct decontamination and decommissioning activities for the gaseous diffusion plant. Increase in funding reflects initiation of soil and groundwater measures to meet commitments and support to award the new contract for decontamination and decommissioning of the gaseous diffusion plant.

Uranium/Thorium Reimbursements (FY 2007 $20.0; FY 2008 $20.0)..... $0
Title X of the Energy Policy Act of 1992 authorizes reimbursement of uranium and thorium processing site licensees for a portion of their cost of cleanup (federal-related byproduct material). FY 2008 request allows payment of eligible claims without delay.

Civilian Radioactive Waste Management

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Office of Civilian Radioactive Waste Management					
Defense Nuclear Waste Disposal					
Defense nuclear waste disposal	346,500	388,080	292,046	-96,034	-24.7%
Nuclear Waste Disposal					
Repository program	19,800	80,986	127,780	+46,794	+57.8%
Integrated spent fuel recycling	49,500	——	——	——	——
Program direction	79,200	75,434	74,674	-760	-1.0%
Total, Nuclear Waste Disposal	148,500	156,420	202,454	+46,034	+29.4%
Total, Office of Civilian Radioactive Waste Management	**495,000**	**544,500**	**494,500**	**-50,000**	**-9.2%**

Funding for the **Office of Civilian Radioactive Waste Management** is requested in two accounts within the Energy and Water Development Appropriation: Nuclear Waste Disposal and Defense Nuclear Waste Disposal. All activities related to the establishment of a permanent geologic repository for nuclear waste are requested within the Nuclear Waste Fund and Defense Nuclear Waste Disposal accounts.

PROGRAM DESCRIPTION

The **Civilian Radioactive Waste Management** (CRWM) program fulfills the U.S. government's responsibility for permanent geologic disposal of spent nuclear fuel and high-level radioactive waste resulting from the nation's civilian and defense atomic energy activities. The program is responsible for developing successful waste acceptance, transportation and disposal strategies that protect public health and safety in ways that are both environmentally and economically viable. The **FY 2008 budget request** of **$494.5 million** supports these activities.

Congress makes two separate appropriations for the program, one from the Nuclear Waste Fund (Civilian) and the other through a Defense Nuclear Waste Disposal appropriation.

Nuclear Waste Fund (Civilian)

The Nuclear Waste Policy Act provides for two types of fees to be levied on the owners and generators of civilian spent nuclear fuel: an ongoing fee of one-tenth of one cent per kilowatt-hour of nuclear electricity generated and sold after April 7, 1983, and a one-time fee for all nuclear electricity generated and sold prior to that date. As of September 30, 2006, there is a total of $25.7 billion in fees and interest collected in the Nuclear Waste Fund of which $6.7 billion has been disbursed for a balance of $19.0 billion.

Defense Nuclear Waste Disposal

Congress provides appropriations for the disposal of high-level waste generated over the past 50 years by defense activities of the U.S. military, the cleanup of World War II- era weapons plants, and the reduction of the nation's nuclear arsenal.

PROGRAM HIGHLIGHTS

Nuclear Waste Disposal (Civilian and Defense)

The mission of the CRWM program is critical to this country's national and economic security. In order for the United States to remain competitive in the global economy, its domestic energy resources need to be developed and utilized effectively. Nuclear energy can play a critical role in providing a significant share of our electrical energy in an environmentally sound manner. Designing, licensing and constructing a geologic repository for spent nuclear fuel and high level waste will resolve the challenge of safe disposal of these materials and make construction of new nuclear power plants more feasible, helping to expand our energy options and secure our economic future. In addition, a secure permanent repository is necessary to support nuclear non-proliferation goals, contributing to national security objectives.

The CRWM program has adjusted its schedule for submitting a license application to the Nuclear Regulatory Commission (NRC) for the construction of a geologic repository. This was required following the decision by the United States Court of Appeals for the District of Columbia Circuit to vacate the Environmental Protection Administration (EPA) standard for the radiological compliance period for waste disposal at Yucca Mountain. In addition, the NRC rejected the Department's certification of its Licensing Support Network. CRWM will submit a high quality license application to NRC by June 30, 2008.

The program continues to implement an operational strategy based on a "clean canisterized" approach for fuel handling. This approach centers on the development of multipurpose canisters that are suitable for the transportation, aging and disposal (TAD) of spent nuclear fuel and high-level radioactive waste. The use of TAD canisters reduces fuel handling operations, permitting smaller, less complex surface facilities at the repository site allowing operations to be conducted in a cleaner, simplified, and safe manner by minimizing radiation exposure issues.

The FY 2008 budget provides $494.5 million for work necessary to support the development of a repository including:

- Defending a license application to the NRC based on a simpler and safer approach to handling spent nuclear fuel and operating the repository;
- Continuing the planning and design for facilities required for the receipt of spent nuclear fuel and high-level waste for emplacement in the repository;
- Making critical infrastructure upgrades at Yucca Mountain to ensure worker, regulator, and visitor safety and operational efficiency; and
- Continuing critical interactions needed to support national transportation planning activities and the Draft Nevada Rail Alignment Environmental Impact Statement.

Finally, the Administration submitted a legislative proposal to Congress that addresses funding reform and regulatory issues that, if enacted, would allow the Department to secure the necessary fiscal resources needed for program success and clears the path for the program to move forward expeditiously toward waste acceptance.

SIGNIFICANT FUNDING CHANGES – FY 2007 to FY 2008 Request ($ in millions)

Yucca Mountain Project (FY 2007 $355.4; FY 2008 $378.4).....+$23.0
In FY 2008, DOE will move forward to submit a high quality License Application (LA) to the Nuclear Regulatory Commission (NRC) no later than 30 June 2008 (+$17.0). The effort includes not only preparation and submission of the LA but also includes oversight and

coordination of license activities to include legal support, and network support for documentation. It also includes pre-licensing interactions with the NRC to allow evaluation of the adequacy of technical and regulatory approaches prior to submission of the LA. The FY 2008 budget supports the repository design to facilitate early procurement, construction, and eventual operation of a geologic repository (+$9.6). Project support has been reduced to increase the Payments Equal to Taxes program (PETT) and oversight funding to the State of Nevada and the Affected Units of Local Government (AULG) program in compliance with the Nuclear Waste Policy Act (NWPA), Section 116 (c) "Financial Assistance" (-$4.8). A new report is mandated to evaluate the need for a second repository (+$2.0). Plant infrastructure requirements have been reduced due to the suspension of facility replacement construction projects initiated in FY 2007 (-$0.8).

Transportation (FY 2007 $67.7; FY 2008 $15.0).....-$52.7
Nevada Rail Line funding is decreased due to a deferment funding of the preliminary design effort (-$21.9). Likewise cask procurement, rail car development, development of support facilities, transportation planning, stakeholder interaction, associated management and other costs are deferred until future periods (-$30.8).

Program Management and Integration (FY 2007 $46.0; FY 2008 $26.4).....-$19.6
In FY 2008, science and technology decreased (-$17.4). Also quality assurance, budgeting, and program management support to the Yucca Mountain Project and the Transportation Project are reflecting identified efficiencies (-$1.8). Systems analysis will utilize tools for modeling and simulation to ensure that systems studies and resulting impacts are assessed in an integrated approach (+$0.6).

Legacy Management

(discretionary dollars in thousands)

	FY 2006 Current Approp.	FY 2007 Congressional Request	FY 2008 Congressional Request	FY 2008 vs. FY 2007 $	FY 2008 vs. FY 2007 %
Office of Legacy Management					
Energy Supply and Conservation					
Legacy management	33,187	33,139	35,104	+1,965	+5.9%
Other Defense Activities					
Legacy management	31,848	156,790	148,063	-8,727	-5.6%
Program direction	13,518	11,061	11,000	-61	-0.6%
Use of prior year balances and other adjustments	-741	——	——	——	——
Total, Other Defense Activities	44,625	167,851	159,063	-8,788	-5.2%
Total, Office of Legacy Management	**77,812**	**200,990**	**194,167**	**-6,823**	**-3.4%**

PROGRAM DESCRIPTION

The **Office of Legacy Management** (LM) ensures the sustainable protection of human health and the environment after DOE cleanup is completed and continues management of certain retirement benefits for former contractor personnel after site closure. In FY 2008, funding for these activities is requested within the Energy Supply and Conservation (non-defense) and Other Defense Activities (defense) appropriations.

This program supports long-term stewardship activities (e.g., groundwater monitoring, disposal cell maintenance, records management, and management of natural resources) at sites where active remediation has been completed. In addition, at some sites the program includes management and administration of pension and benefit continuity for contractor retirees. The **FY 2008** budget **request** of **$194.2 million** supports these activities.

PROGRAM HIGHLIGHTS

The FY 2008 request provides $159.1 million to carry out legacy management functions for defense activities and $35.1 million for energy supply activities. In FY 2008, post closure responsibility for long-term stewardship activities and pension and benefit claims for former contractor employees at the Rocky Flats, Colorado, and the Fernald, Ohio, closure sites will be funded within the LM budget.

SIGNIFICANT FUNDING CHANGES – FY 2007 to 2008 Request ($ in millions)

Energy Supply and Conservation

Legacy Management (FY 2007 $33.1; FY 2008 $35.1) .....+$2.0
Increase reflects medical inflation for the costs of post-retirement benefits for former contractor employees.

Other Defense Activities

Legacy Management (FY 2007 $156.8; FY 2008 $148.1) .....-$8.7
Funding decrease reflects a reduction in costs of long-term surveillance and maintenance, a reduction in two sites' Employee Retirement Income Security Act (ERISA) minimum contributions to the pension fund, and a change in the method of managing pension and post