Environmental Management

Executive Budget Summary

The U.S. Department of Energy's (DOE) Environmental Management (EM) program is requesting $5.803 billion of traditional budget authority and $515 million of privatization funding, for a total Fiscal Year (FY) 2001 budget request of $6.318 billion. The traditional budget authority request consists of $4.645 billion under the Defense Environmental Restoration and Waste Management appropriation, $1.082 billion under the Defense Facilities Closure Projects appropriation, $286 million under the Non-Defense Environmental Management appropriation, and $303 million under the Uranium Enrichment Decontamination and Decommissioning Fund appropriation. This request is offset by $420 million for the Federal Contribution to the Uranium Enrichment Decontamination and Decommissioning Fund, $9.7 million for Contractor Travel Savings, $50.0 million for the Dupont Pension Offset, and $34.3 million for the Use of Prior Year Balances. The structure of the EM budget is based on the grouping of activities into projects at the various Departmental sites, a crucial step in expediting work and lowering the cost of carrying out the EM mission. Details regarding the DOE Environmental Management program or the EM budget request for FY 2001 can be found on the world-wide-web at http://www.em.doe.gov.

I. EM FY 2001 Budget Request

A budget request of $5.803 billion for FY 2001 for traditional budget authority represents an increase of $113.5 million (2 percent) from the FY 2000 Appropriation of $5.689 billion. This level of funding is sufficient to ensure the protection of workers in all EM activities across the DOE complex, be substantially in compliance with agreements and requirements, address planned Defense Nuclear Facilities Safety Board recommendations, address known significant safety risk issues, develop cost- and schedule-reducing alternative cleanup technologies, and continue closure activities.

The FY 2001 request will enable the EM program to continue to close as many sites as possible by 2006. This request fully reflects the project-oriented structure that EM has developed as a key component of its strategy to accelerate cleanup and reduce costs. It includes a brief description of each project and the budget authority being requested. It also includes the performance metrics that will be used to measure the progress of the project, as well as key milestones (if applicable). In accordance with the Government Performance and Results Act, the performance measures reflect the linkage between the EM budget and the program's goals and objectives as stated in the Department of Energy's Strategic Plan, the commitments for FY 2001 in the DOE Annual Performance Plan, and the commitments in the Secretary's Performance Agreement with the President. The requested funds for Science and Technology activities are consistent with the EM Research and Development Program Plan which 'maps' investments in solutions to site-identified needs.

In addition to the request for traditional budget authority, EM is requesting $515 million (includes offset of -$25 million for use of prior year balances) in the Defense Environmental Management Privatization appropriation account for FY 2001. This funding will enable EM to continue on schedule with the Tank Waste

Remediation System, Phase I project at Richland; and the Advanced Mixed Waste Treatment and Spent Nuclear Fuel Dry Storage projects at Idaho.

The following table is a summary of EM's FY 2001 request compared to the FY 1999 and FY 2000 Appropriations.

EM FY 2001 Budget Request

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Albuquerque	203,549	200,241	217,163
Carlsbad	185,405	181,417	194,498
Chicago	53,922	53,702	38,827
Idaho	431,504	401,968	451,259
Nevada	80,081	87,471	90,212
Oakland	86,831	82,761	86,482
Oak Ridge	515,250	537,808	620,050
Ohio	497,799	510,975	524,975
Richland	691,584	719,759	726,280
Office of River Protection	310,445	338,457	382,139
Rocky Flats	657,200	664,675	664,675
Savannah River	1,219,552	1,199,144	1,266,884
Multi-Site	86,677	92,711	47,000
EH Health Studies	12,000	0	0
Reprogramming Reserves	0	33,200	0
Program Direction	337,073	339,409	359,888
Science & Technology	236,715	228,131	196,548
D&D Fund Deposit	398,088	420,000	420,000
U/Th Reimbursement	30,000	30,000	30,000
Subtotal, EM	6,033,675	6,121,829	6,316,880
Use of Prior Year Balances	-39,012	-3,777	-34,317
Y2K Supplemental Appropriation	13,840	0	0
Dupont Pension Offset	0	-8,700	-50,000
Contractor Travel Savings	0	0	-9,700
D&D Fund Offset	-398,088	-420,000	-420,000
Total, Traditional Budget Authority	5,610,415	5,689,352	5,802,863
Privatization	228,357	188,282	515,000
Total, EM	5,838,772	5,877,634	6,317,863

II. Background: Cleanup Challenges and Vision for the Future

Over the past five decades, DOE and its predecessor agencies developed the largest government-owned industry in the United States, responsible for the research, development, testing, and production of nuclear weapons, as well as a variety of nuclear-related research projects. When most nuclear weapons production operations ceased in the late 1980's, DOE created the EM program to manage the thousands of contaminated areas and buildings, huge waste volumes, and nuclear materials left over from the nuclear weapons production process. EM's responsibilities include facilities and areas at 113 geographic sites [a] (excluding the 21 sites in the Formerly Utilized Sites Remedial Action Project transferred to the U.S. Army Corps of Engineers). These sites are located in 30 States and one territory, and occupy an area equal to that of Rhode Island and Delaware combined -- about 2 million acres.

In addition to EM's responsibilities for environmental remediation, decommissioning of facilities, and the storage, treatment, and disposal of nuclear and hazardous wastes, EM is responsible for the safe management of approximately 18 metric tons of plutonium metal and oxides and residues. Careful handling and storage of plutonium is required to avoid potential radiation, contamination, and pyrophoricity problems. Because of its potential use in nuclear weapons, plutonium must also be stored in a manner to prevent theft or diversion. Thousands of metric tons of highly radioactive spent nuclear fuel, a by-product of the Department's weapons production process, are also under EM's care. Some of this spent fuel is corroding in its current storage. Further, EM is managing the return of foreign research reactor spent nuclear fuel from a number of different nations to meet key non-proliferation goals of the United States. EM's goals in meeting these responsibilities are to reduce urgent risks to human health and the environment, meet crucial national non-proliferation goals, manage the long-term contamination and safety threats, and reduce program costs. EM is committed to carrying out this mission in a manner that fully protects the health and safety of its workers.

In June 1996, to reconcile the pressing need to stabilize spending levels in the short-term, while reducing both economic and environmental liabilities over the long-term, EM established a vision for the program:

> *By 2006, the Environmental Management program intends to complete cleanup at most of its 53 remaining sites [b]...This vision will drive budget decisions, the sequencing of projects, and the actions needed to meet program objectives. This vision will be implemented in collaboration with stakeholders, regulators, and Tribal Nations.*

Accelerating cleanup and project completion are central goals of the EM program. Accelerating cleanup can reduce both short-term and life-cycle program costs, and is necessary to demonstrate progress towards the completion of the EM mission. As of the beginning of FY 2000, cleanup had been completed at 69 of the 113 geographic sites [a] in the EM program, leaving 44 to be completed.

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[a] This total does not include the Atlas Site in Moab, Utah; which would increase the total number of geographic sites to 114. DOE has requested the authority in FY 2001 to remediate this site.

[b] The number of remaining sites was 53 at the time the EM vision was published. As of the beginning of FY 2000, there are 44 sites remaining to be cleaned up.

Even after completing cleanup, EM will maintain a presence at most sites to monitor, maintain and provide information on the contained residual contamination. These activities are designed to maintain long-term protection of human health and the environment. Such long-term stewardship will include passive or active institutional controls and, often, treatment of groundwater over a long period of time. The extent of long-term stewardship required at a site will depend on the end state reached at that particular site. Each site's end state will be determined after consultation among DOE and other representatives of the Administration, Congress, Tribal Nations, representatives of regulatory agencies, and State and local authorities, representatives of non-governmental organizations, and interested members of the general public.

Life-cycle planning is an essential management tool used in the EM program. Beginning with the *Baseline Environmental Management Reports*, and continuing with the process explained in the report *Accelerating Cleanup: Paths to Closure*, EM has attempted to quantify the life-cycle costs of the EM program, identify the long-term challenges facing the program, and develop management strategies for addressing those challenges.

EM is making progress towards achieving the near-term vision to complete cleanup at as many sites as possible by 2006. The life-cycle planning process has been particularly successful in developing the strategy and support for the accelerated closure of the Rocky Flats site in Colorado. At Rocky Flats, this strategy includes improving project baselines, using contractual incentives for project acceleration, integrating waste and material disposition across several DOE sites and programs, and working with stakeholders, regulators and the Congress on an acceleration strategy and solving emerging issues. These management initiatives have reduced the projected costs of site closure by several billions of dollars and accelerated closure schedules by years. Nonetheless, significant challenges remain at many sites, including the largest sites where cleanup is expected to continue well beyond 2006. These strategies must be applied elsewhere as well.

III. FY 2001 Budget Strategy/Priority

The EM budget request for FY 2001 -- an increase of approximately $440 million (7 percent) over the level appropriated for FY 2000 -- reflects the Department's continued commitment to worker health and safety, compliance with legal agreements and requirements, addressing urgent risks, and cleaning up as many sites as possible by 2006, as well as management strategies for addressing both the near- and long-term challenges facing the program.

In developing the FY 2001 request, EM conducted a "peer review" process, similar to the process used by the Department for FY 2000, to review the EM budget. The purpose of this review was to categorize the EM activities in a consistent manner across the DOE complex. This was accomplished by first identifying whether the activities were driven by: compliance agreements, Defense Nuclear Facilities Safety Board recommendations, DOE Orders, Agreements-in-Principle, or other essential management functions (e.g., landlord activities); and then identifying whether the activities were undertaken to provide a minimum level of safety, provide essential services, address significant safety risks, satisfy additional environmental requirements, support non-proliferation objectives, reduce mortgages, or satisfy 'community mandates' (e.g., activities that support regulatory oversight, Site Specific Advisory Boards, Tribal Nation involvement, etc.). The results of this "peer review" support EM's budget request to maintain compliance with applicable legal requirements and agreements.

The following are major principles and strategies that are the foundation for the EM program in FY 2001:

- Protect Worker Health and Safety
- Address serious risks
- Maintain compliance
- Accelerate cleanup and reduce costs
- Ship transuranic waste to the Waste Isolation Pilot Plant in Carlsbad, New Mexico
- Utilize privatization initiatives where appropriate
- Integrate waste and materials management
- Continue to make the EM program more efficient
- Accelerate deployment of technologies and invest in science
- Implement an Integrated Planning, Accountability and Budgeting System for EM
- Work with regulators, stakeholders, and Tribal Nations

EM will seek additional efficiencies within the appropriated funding levels to accommodate emerging issues and requirements within the fiscal constraints. At some point, however, other measures also may be necessary. For example, it may be necessary to consider re-sequencing work in some cases. EM will work closely with other Departmental elements, stakeholders, regulators, the Defense Nuclear Facilities Safety Board, the Office of Management and Budget, Tribal Nations, and the Congress prior to rescheduling work.

A. Protect Worker Health and Safety

The Department's commitment to protecting its workers is paramount. In achieving its overall program objectives, EM will not sacrifice worker health and safety in any manner. Since its inception, the EM program has placed a high priority on achieving its mission in a manner that ensures a safe and healthy workplace. The newly formed EM Office of Safety, Health, and Security is committed to ensuring that worker safety and security are integral to all EM programs and activities by instilling in all EM employees an instinctive understanding of their responsibilities in these areas, and by providing a core technical resource to EM line programs where needed. In short, EM remains committed to its policy to "Do Work Safely or Don't Do It At All." Integral to its core programs, EM emphasizes safety by advancing Integrated Safety Management, new technologies for training workers, and worker-based training programs through a number of sources such as the Worker Protection at Nuclear Weapons Facilities Training Grant Program and the National Environmental Training Program.

B. Address Serious Risks

The Department is committed to ensuring its facilities and activities pose no undue risks to the public and worker health and safety. The FY 2001 request provides sufficient funding to accomplish this goal, as well as to reduce the most serious environmental risks across the DOE complex. These include maintaining the safe containment of high-level waste stored in tanks at Hanford, Washington, and Savannah River, South Carolina; stabilizing plutonium at Hanford, Washington, Rocky Flats, Colorado, and Savannah River, South Carolina; and ensuring the safe storage of spent nuclear fuel at Hanford,

Washington, Idaho National Engineering and Environmental Laboratory, Idaho, and Savannah River, South Carolina.

C. Maintain Compliance

At the FY 2001 request level of $6.318 billion (including privatization), EM will be substantially in compliance with applicable environmental and other requirements at most of its sites. EM plans to comply with all applicable requirements of Federal, State, and local statutes and regulations; permits, administrative orders, or judicial decrees; and enforceable milestones or schedules established in agreements negotiated between EM and regulators. In addition, the EM program intends to meet most commitments to the Defense Nuclear Facilities Safety Board. As the program is making progress in completing its near-term vision, innovation and close collaboration with Congress, regulators and stakeholders has been, and will continue to be, necessary to meet our compliance requirements in a practical and efficient manner. EM will work closely with regulators, the Defense Board, and others to achieve this objective. Additionally, the strategies identified in the following sections--accelerating cleanup, reducing costs, privatization, increasing efficiency, and accelerating deployment of new technologies--will help EM meet its compliance requirements in a more efficient and cost-effective manner.

D. Accelerate Cleanup and Reduce Costs

The Department's strategy for accelerating cleanup was presented in the report *Accelerating Cleanup: Paths to Closure*. This report provides a project-by-project depiction of the technical scope, cost, and schedule required to complete work at the remaining DOE sites. EM now formulates budgetary and policy strategies and goals with consideration given to impacts to life-cycle costs and schedules. EM sites are working to reduce the outyear mortgage by completing projects in the quickest, most efficient manner possible, thereby reducing life-cycle costs and schedules.

In order to more closely align the annual budget formulation process with the life-cycle planning process, all EM activities have been organized into "projects," which have a defined scope and end state. Project Baseline Summary documents describe these projects and include the following: scope, schedule, cost, compliance, safety and health, risk, performance metrics, and other data. The EM program budget accounts are structured to more closely align with the EM goal of accelerated cleanup and the Project Baseline Summaries have been grouped into the appropriate budget accounts to be consistent with these goals.

In August 1997, the Secretary of Energy designated three sites -- Rocky Flats, Fernald and Miamisburg – as pilot sites for accelerated closure. In support of the vision of accelerated cleanup and site closure, Congress in FY 1998 designated a new Defense Facilities Closure Projects appropriation to accelerate the closure of the Rocky Flats and Fernald sites. In FY 1999, this appropriation account was expanded to include all of the defense-funded Ohio sites. The FY 2001 request continues to support these initiatives.

Consistent with the Department's Phase I preliminary investigation completed on September 14, 1999, the Department has identified the Paducah and Portsmouth Gaseous Diffusion Plants as areas within the EM program that could be accelerated to address additional health and safety related concerns of legacy

waste storage, stabilization of shutdown facilities, and residual transuranic contamination in soils and sediments.

< The Paducah FY 2001 request of $78 million, an increase of $23.8 million from FY 2000, will accelerate disposal of 7,500 tons of crushed drums from Drum Mountain in the first quarter of FY 2001. The increase will also enable the Department to permit issuance in FY 2001 of a Record of Decision at Paducah for implementing the final remedial action of sources contributing to the existing northeast and northwest contaminated groundwater plumes; accelerate stabilization activities in the metals plant and feed plant shutdown buildings; and characterize and dispose of the remaining 9,000 drums of low-level waste.

< The Portsmouth FY 2001 request of $76.2 million, an increase of $30.1 million from FY 2000, will accelerate disposal of approximately 300 containers of heavy metal sludge to ensure compliance with site treatment plan milestones; accelerate Quadrants I & II corrective measure implementation design and construction for final soil and groundwater contamination sources to ensure completion in FY 2002 to meet a Resource Conservation and Recovery Act Consent Order enforceable milestone; and continue characterization of approximately 14,000 drums of Toxic Substance Control Act low-level waste solids.

E. Ship Transuranic Waste to the Waste Isolation Pilot Plant

On March 26, 1999, after two decades of development, the Waste Isolation Pilot Plant opened and the first shipment of non-mixed (radioactive waste that does not contain Resource Conservation and Recovery Act constituents) transuranic waste from the Los Alamos National Laboratory was received at the site for disposal. During FY 2000 and FY 2001, the Waste Isolation Pilot Plant has received or will receive transuranic waste from the Los Alamos National Laboratory, the Idaho National Engineering and Environmental Laboratory, the Rocky Flats Environmental Technology Site, the Hanford Site, and the Savannah River Site. The Waste Isolation Pilot Plant will meet transuranic waste disposal goals by ramping up to a receipt rate of 13 contact-handled transuranic waste shipments per week by the end of FY 2001, which is based on waste site demands and transportation fleet availability. The expected quantity of transuranic waste shipments will increase from 120 in FY 2000 to about 485 in FY 2001. The expected quantity of transuranic waste disposed will increase from about 1,200m^3 in FY 2000 to about 3,450m^3 in FY 2001. The Department remains committed to meeting its obligations for treatment, storage, and disposal of transuranic waste. Once waste treatment, transportation, and disposal have been completed, the transuranic waste will be isolated, and the risks from storing transuranic waste at multiple sites across the country will have been eliminated.

F. Utilize Privatization Initiatives Where Appropriate

Privatization remains a key component of EM's strategy to reduce cleanup costs. Essentially a form of innovative contracting, the objective of EM privatization is to reduce the cost of products and services by having the Government pay for products delivered in accordance with desired specifications (e.g., treated waste, waste disposed of, or soil remediated). Through open competition, market forces should establish the most efficient contractual price for a specified service or product while shifting some of the performance risk and incentives to the contractor. The selected contractor(s) will be responsible for and own development of technologies, equipment, and facilities necessary to deliver the end product or

service. Whether privatization is the most appropriate contracting strategy for a particular site or activity is determined on a case-by-case basis.

In FY 2001, the EM program is requesting $515 million for privatization projects. This request provides $450 million for continuation of the Tank Waste Remediation System for high-level waste treatment at the Hanford Site in Washington; $65 million for the Advanced Mixed Waste Treatment Project at Idaho; and $25 million for the Spent Nuclear Fuel Dry Storage project at Idaho. The request is further offset by -$25 million for the use of prior year balances.

The Hanford Tank Waste Remediation System project will vitrify into a waste form suitable for permanent disposal off-site, the high-level waste currently stored in underground temporary storage tanks located near the Columbia River. The Hanford Tri-Party Agreement requires the Department to vitrify all tank waste by 2028. In 1996, the Department competitively awarded a contract to British Nuclear Fuels, Ltd. (BNFL) for the design of a pilot vitrification facility. Under the contract, BNFL will design, construct, operate, and own the vitrification facility, and the Department will purchase vitrified waste at a fixed-price from the BNFL once it is produced according to specifications. Under this approach, significantly greater risk for non-performance is placed on the contractor than under the more traditional methods of contracting. After examining a variety of potential contractual approaches to this project, the Department concluded that "privatization" would be most cost-effective for the Federal Government.

In August 2000, following review of the design and further negotiations regarding the terms for the eventual purchase of the vitrified waste, the Department will determine whether to authorize BNFL to begin construction of the facility. The budget authority requested for FY 2001 is necessary to ensure that the Department has sufficient budget authority to cover the capital expenditures that will be incurred by the contractor if the Department authorizes construction. The current schedule for construction and operation of the project is necessary to meet re-negotiated milestones for this project in the Tri-Party Agreement.

The Advanced Mixed Waste Treatment project at Idaho will treat 65,000 cubic meters of transuranic waste located in retrievable storage. This project is necessary to meet the October 1995 Idaho Settlement Agreement requirement to ship all transuranic waste out of Idaho by 2015 (target) and no later than 2018. It is also necessary to meet site treatment plan milestones under the Federal Facility Compliance Act. In accordance with the agreement, facility construction will be completed by December 31, 2002, and operations will commence no later than March 31, 2003.

The privatized Spent Nuclear Fuel Dry Storage Project at Idaho will provide the capabilities to initiate interim dry modular storage of spent nuclear fuel. The fuel currently resides in facilities at Idaho, various universities, and foreign research reactors. This project will place approximately 55 metric tons of heavy metal of spent nuclear fuel (22% of the Idaho total) into dry interim storage prior to shipment out of the State of Idaho. This project is necessary to meet the requirements of the October 17, 1995, Federal court-ordered agreement between the State of Idaho, DOE, and the Navy, directing that all spent nuclear fuel will be out of wet storage by 2023 and shipped out of the State of Idaho by January 1, 2035.

G. Integrate Waste and Materials Management

The EM FY 2001 request includes several key initiatives to substantially reduce mortgage and outyear costs by moving materials to other sites and taking advantage of treatment and/or storage facilities. The EM program continues to formalize the baselines for each site, as well as integrate the baselines across sites for nuclear waste and materials. The Department has included funding to accelerate the movement of the plutonium from Rocky Flats to Savannah River two years earlier than previously planned, thus supporting Rocky Flats closure by 2006. In this capacity, the Savannah River request, in conjunction with other Rocky Flats projects, could result in significant life-cycle cost savings.

H. Continue to Make the EM Program More Efficient

The EM program continues to strive to become more efficient. To improve its productivity, EM is drawing upon past experience, examining and incorporating best practices in the private sector, learning from the experience of other government agencies, and analyzing the performance of its program.

At Oak Ridge, the management and integration contractor, Bechtel Jacobs Company, has competitively subcontracted approximately 50% of the work with the goal of 75% by April 1, 2000. As of the end of July 1999, the contract value of subcontracts awarded is $309 million with a projected $144.8 million savings over the life of the contract.

To manage support costs, EM has adopted a common methodology for tracking such costs. Using cost category definitions developed by the Financial Management Systems Improvement Council, the Department's Chief Financial Officer is tracking this information, broken out by cost category, fiscal year, and direct and indirect funding sources. By examining cost trends in each of these categories and benchmarking these costs at EM sites against similar costs in the private sector, EM can focus on measures to reduce specific support costs. Savings are being achieved and hopefully more areas can be reduced, so more funding is available for actual cleanup.

I. Accelerate Deployment of Technologies and Invest in Science

The EM Science and Technology program has matured to the point where significant performance gains and cost savings, in the form of cost avoidance, can be achieved through aggressive deployment of the large number of currently and soon-to-be available technologies. EM sites have identified over 500 technology problems for which technological solutions can achieve schedule improvements prior to 2006 and produce significant cost savings. EM believes that technology development offers some of the program's best opportunities for substantial cost reductions. EM has implemented a Research and Development Program Plan that maps investments in solutions to site-identified needs to ensure work is being performed on the highest priority needs. This plan ensures our science and technology activities are planned and managed in an interactive, coordinated and participatory relationship with EM cleanup project managers and stakeholders.

EM has also identified those areas where innovative technologies will be needed to solve problems that are currently intractable, such as the high-level radioactive tank waste and Dense Non-Aqueous Phase Liquids. The EM Science Program conducts a long-term basic research effort, in cooperation with the Department's Office of Science, that focuses on long-term problems.

For FY 2001, the EM program is requesting $196.5 million for the Science and Technology program. The Science and Technology program has expanded its role to encompass basic research through deployment assistance.

J. Implement an Integrated Planning, Accountability and Budgeting System for EM

EM has implemented its Integrated Planning, Accountability and Budgeting System (IPABS) consisting of two principal components: the IPABS handbook describing EM's primary business processes of planning, budgeting, execution, and evaluation; and the IPABS-Information System, which together with the EM Corporate Database, comprise EM's central information system. IPABS-Information System consists of modules designed to support EM's key business processes. Data Collection Modules are used for data input, which feed the EM Corporate Database that provides data output to the Reporting Module of IPABS-Information System. EM's Corporate Database is the authorized source of data for the EM program to ensure data standardization, data validity, data auditability, data traceability, and data consistency. Most major data collection systems in EM have been consolidated into the IPABS-Information System web-enabled application. EM's major reporting requirements use the IPABS-Information System as the primary source of data.

The IPABS incorporates several fundamental improvements that streamline the EM management system into one cohesive system supporting the cleanup vision. The most notable of these improvements is that EM has projectized all its work.

K. Work with Regulators, Stakeholders and Tribal Nations

Public participation is a cornerstone of the EM program. By working cooperatively with regulators, stakeholders, local community officials, and Tribal Nations, the EM program has improved its efficiency and been able to meet its regulatory requirements in a more efficient and cost-effective manner. EM has formally established a number of mechanisms for regular intersite dialogue and input into EM decision making on local and national issues. Among these mechanisms are the Environmental Management Advisory Board, Site-Specific Advisory Boards, and the State and Tribal Governmental Working Group; the National Governors' Association Task Force; the National Association of Attorneys General; Energy Community Alliance; and the Transportation External Coordinating Working Group. For several years, EM has been a leader among Federal agencies in involving the public in the budget process. EM has conducted regular public meetings on issues of public interest, and recently, the Secretary of Energy has personally met with the Governors from DOE host States (in February 1999 and September 1999) to facilitate a dialogue between the Department and the States and establish principles to guide this ongoing relationship.

L. Long-Term Stewardship

The Department is committed to addressing its long-term stewardship responsibilities following completion of stabilization, cleanup, and disposal at sites and portions of sites. Long-term stewardship is required to protect human health and the environment from hazards remaining after stabilization, disposal, and cleanup is complete. Complete restoration to levels acceptable for unrestricted use cannot be accomplished at many sites. Consequently, long-term stewardship will be needed at these sites to ensure that the selected remedies will remain protective for future generations. The sites expected to require

DOE stewardship range from small sites (approximately the size of a football field) with limited contamination, such as the General Atomics site in California, to large and complex ones such as the Nevada Test Site (larger than the state of Rhode Island). The nature and extent of anticipated long-term stewardship activities will vary based on the amount and type of residual contamination, the anticipated future site uses, and other factors (e.g., proximity to a river or a flood plain). The Department is committed to developing a long-term stewardship program that addresses these issues and ensures appropriate stakeholder involvement. Specifically, in FY 2001, the Department has committed to: (1) submit a report to Congress by October 1, 2000, which documents existing and anticipated long-term stewardship responsibilities for DOE sites or portions of DOE sites where cleanup projects are projected to be completed by calendar year-end 2006; (2) identify funding requirements for long-term stewardship as distinct baselines at individual sites; and (3) produce the final study on long-term stewardship pursuant to the 1998 Programmatic Environmental Impact Statement settlement agreement. In FY 2000, the Department has committed to: (1) by June 2000, produce the draft study on long-term stewardship pursuant to the 1998 Programmatic Environmental Impact Statement settlement agreement; and (2) continue coordination with the National Academy of Sciences/National Research Council on the release of their analyses on long-term site disposition.

IV. FY 2001 Budget Structure

The EM budget structure aligns with EM's goals of accelerating cleanup and moving to project-based management. This structure is intended to continue to improve EM's ability to track progress and costs and provide a more understandable reporting structure. There are three fundamental elements to this structure:

- Organizing work into 'projects' (which are described in Project Baseline Summaries);
- Using program accounts which focus on site closure, site/project completion, and post 2006 completion; and
- Aligning performance measures (metrics) by project to meet the intent and requirements of the Government Performance and Results Act.

The budget structure categorizes projects according to their specific appropriations -- Defense Facilities Closure Projects; Defense Environmental Restoration and Waste Management; Defense Environmental Management Privatization; Non-Defense Environmental Management; and the Uranium Enrichment Decontamination and Decommissioning Fund.

A. Project Baseline Summaries

For fiscal year 2001, EM has more than 430 projects (as described in Project Baseline Summaries) that include (1) defined scopes, schedules, and costs; (2) budget data; (3) performance and key milestone data; and, (4) compliance and safety and health data. The EM program has also aggregated the budget and performance data for each site to demonstrate the results that will be accomplished for the resources requested. A list of these projects is provided in section "VII. Ancillary Tables" at the end of this Executive Budget Summary.

B. Program Accounts: Focus on Accelerating and Completing Cleanup

EM's three budget program accounts reflect near-term goals and emphasis on completion.

Site Closure. This account provides funding for completing cleanup and closing down facilities with no enduring Federal presence on-site, except for stewardship activities. The Site Closure account under the Defense Facilities Closure Projects Appropriation includes the Rocky Flats site in Colorado, and the Fernald, Miamisburg, Columbus, and Ashtabula sites in Ohio. In the Non-Defense Appropriation, the Site Closure account includes Grand Junction in Colorado; Weldon Spring in Missouri; and the UMTRA-Groundwater sites in various states. The Department has established a goal of completing cleanup at the sites in this account by the end of 2006.

Site/Project Completion. This account funds those projects for which EM has established a goal of completion by 2006 at (1) EM sites where overall site cleanup will not be fully accomplished by 2006; and (2) DOE sites where EM has set a goal of completion of all EM projects by 2006 (except for long-term stewardship activities), but where there will be a continuing Federal workforce at the site to carry out enduring non-EM missions. Examples of non-EM missions include support of nuclear weapons activities or scientific research, and the necessary waste management activities to handle newly-generated wastes from these missions. This account includes projects and sites under the following Operations Offices: Albuquerque, Chicago, Idaho, Oakland, Richland, and Savannah River.

In a limited number of cases, sites have been placed in the Site/Project Completion account even though there is no expectation of a continuing mission after cleanup is completed. In these instances, use of the Site Closure account would have created an additional appropriation control for an Operations/Field office with a limited amount of associated funding, thereby hindering managerial flexibility in the execution of projects at these sites.

Post 2006 Completion. This account provides funding for projects that are expected to require work beyond FY 2006. This includes projects at Albuquerque, Idaho, Nevada, Oakland, Oak Ridge, Ohio, Richland, Office of River Protection, and Savannah River, as well as the Waste Isolation Pilot Plant in Carlsbad, New Mexico, and Multi-Site activities.

This account includes efforts at the largest DOE sites, where operations have been carried out over a long period of time and associated cleanup will also take longer to complete. Note that *some* projects have been moved from the Site Closure or Site/Project Completion accounts to this account, consistent with the budget structure, because the most recent estimates for those projects indicate that funding will be necessary beyond FY 2006.

A table reflecting the EM FY 2001 request by Operations Office, Appropriation, and Program Account follows:

Environmental Management
FY 2001 Budget Request
By Operations Office, Appropriation, and Program Account

(dollars in thousands)

	Defense Facilities Closure Projects	Defense ER&WM				Non-Defense EM				UE D&D Fund	Total EM
		Site/Proj Compl	Post 2006 Compl	Other	Total	Site Closure	Site/Proj Compl	Post 2006 Compl	Total		
Albuquerque	0	67,346	101,654	0	169,000	28,520	10,562	9,081	48,163	0	217,163
Carlsbad	0	0	194,498	0	194,498	0	0	0	0	0	194,498
Chicago	0	0	914	0	914	0	37,913	0	37,913	0	38,827
Idaho	0	100,692	348,711	0	449,403	0	1,856	0	1,856	0	451,259
Nevada	0	0	90,212	0	90,212	0	0	0	0	0	90,212
Oakland	0	2,000	51,882	0	53,882	0	13,090	19,510	32,600	0	86,482
Oak Ridge	0	0	293,896	0	293,896	53,116	0	0	53,116	273,038	620,050
Ohio	417,622	0	0	0	0	0	0	107,353	107,353	0	524,975
Richland	0	349,467	375,313	0	724,780	0	1,500	0	1,500	0	726,280
Off of River Protection	0	0	382,139	0	382,139	0	0	0	0	0	382,139
Rocky Flats	664,675	0	0	0	0	0	0	0	0	0	664,675
Savannah River	0	452,871	814,013	0	1,266,884	0	0	0	0	0	1,266,884
Multi-Site	0	0	43,300	0	43,300	0	0	3,700	3,700	0	47,000
U/Th Reimbursement	0	0	0	0	0	0	0	0	0	30,000	30,000
D&D Deposit	0	0	420,000	0	420,000	0	0	0	0	0	420,000
Program Direction	0	0	0	359,888	359,888	0	0	0	0	0	359,888
Science & Technology	0	0	0	196,548	196,548	0	0	0	0	0	196,548
Subtotal, EM	1,082,297	972,376	3,116,532	556,436	4,645,344	81,636	64,921	139,644	286,201	303,038	6,316,880
Prior Year Balances	0	TBD	TBD	0	-34,317	0	0	0	0	0	-34,317
Dupont Pension	0	0	0	0	-50,000	0	0	0	0	0	-50,000
Contractor Travel	0	-1,425	-8,075	0	-9,500	0	-200	0	-200	0	-9,700
D&D Fund Deposit	0	0	0	0	0	0	0	0	0	-420,000	-420,000
Total, Trad'l BA	1,082,297	970,951	3,108,457	556,436	4,551,527	81,636	64,721	139,644	286,001	-116,962	5,802,863
Privatization											515,000
Total, EM											6,317,863

C. Government Performance and Results Act Implementation

The EM program has been actively involved in incorporating the requirements of the Government Performance and Results Act into its planning, budgeting, and management systems. The Act requires: (1) Strategic Plans that articulate each program's fundamental missions and provide long-term, general goals for implementing the missions; (2) Annual Performance Plans that provide the direct link between the longer-term goals outlined in the Strategic Plan and what managers do on a day-to-day basis; and (3) Annual Performance Reports that describe the program results for the resources expended and how well the previous year's Annual Performance Plan goals were met.

The EM program is making progress in implementing the requirements of the Government Performance and Results Act. Specific areas of emphasis include the following:

EM will establish FY 2000 Management Commitments for each Operations/Field Office that are based on a roll-up of the Project Baseline Summary performance goals and selected key milestones reported in the FY 2001 request. These commitments will be used as a management tool for assessing program performance and results during periodic status reviews.

The EM program will focus on improving the accuracy and completeness of its performance measures data. In particular, the life-cycle quantity estimates for the measures (i.e., cubic meters of waste disposed) will be further refined and improved to set the near-term performance goals within the appropriate context of the total environmental work scope to be accomplished. EM will continue to manage using the Corporate Performance Measures (i.e., release site completions, facilities decommissioned, waste disposed, etc.) to demonstrate quantifiable progress towards completion of EM's geographic sites.

The EM program will continue to improve its effectiveness and efficiency. To reduce the costs of EM's massive cleanup effort, the program continues to seek opportunities to accelerate cleanup without jeopardizing the safety of workers, communities, or the environment. By implementing enhanced performance, EM will be able to accelerate cleanup and closure schedules, and thereby lower life-cycle cleanup costs. EM has established accelerated site closure goals for the Rocky Flats Environmental Technology Site (from 2010 to 2006), the Fernald Environmental Management Project (from 2008 to 2006), and Miamisburg Environmental Management Project (from 2005 to 2004).

EM has identified several enhanced performance mechanisms that are expected to result in improvements to productivity and/or accelerated site closure:

< Acceleration of Technology Deployment -- Introducing less expensive and/or more effective cleanup technologies;

< Integration -- Identifying better ways to transfer and manage waste, spent nuclear fuel, and nuclear material among sites;

< Project Sequencing -- Completing projects with high "up-keep" costs;

- Contract Reform -- Creating incentives for contractors to improve performance (quality results and accelerated completion); and
- Lessons Learned -- Increasing productivity based on lessons learned.

V. Transfer of Responsibilities

The FY 2001 request reflects the following transfers of responsibility which affect the EM program:

Re-engineering Waste Management: This effort transfers responsibility from EM to the DOE Office of Science for newly-generated waste at research laboratories which are managed by the Chicago, Oakland, and Richland Operations Offices. This concept, endorsed by the National Academy of Sciences and others, holds waste generators and their mission programs more accountable for the waste they generate by having them pay for the treatment, storage, and disposal of their newly-generated waste. This transfer is in accordance with the Memorandum of Agreement between EM and the Office of Science dated April 12, 1999.

Lead Program Secretarial Office: In response to a DOE Management Review conducted in April 1999, the Department has adopted a Lead Program Secretarial Office concept for field office reporting. Previously, the eleven operations/field offices reported officially to the Office of Field Management. The new arrangement requires that each field office report directly to their assigned Lead Program Secretarial Office. EM is the Lead Program Secretarial Office for the Richland, Savannah River, Idaho, Rocky Flats, and Ohio Field/Operations Offices, as well as the Office of River Protection.

VI. Environmental Management Corporate Performance Measures

EM has developed and implemented a performance-based budget that clearly demonstrates the program and project results expected for the resources requested. EM has developed specific corporate performance measures to link planning goals with the budget, program execution, and evaluation of program performance and results. The EM corporate performance measures demonstrate tangible environmental results towards completing cleanup (or achieving the intended end state) at the remaining geographic sites. These corporate performance measures include:

Volume of waste treated and disposed

Number of release site cleanups completed

Number of facilities decommissioned

Quantity of nuclear material stabilized

Quantity of spent nuclear fuel moved to dry storage and prepared and shipped for consolidation

Number and type of innovative technology deployments

The summary-level performance measures reflected in the FY 2001 request are based upon the project-level performance measures contained in the Project Baseline Summaries. The linkage between the projects' performance measures and EM's budget request will enable EM, the Congress, and others to track, on an annual basis, EM's progress towards its commitments, as well as progress towards project and geographic site completion.

The FY 2001 request presents performance measures data at the Project Baseline Summary level and at various roll-up levels to demonstrate key program accomplishments and results at EM's sites. The Project Baseline Summary narrative provides a description of the project's activities, measures, and work scope to fully address planned and actual accomplishments and results. Each project includes a list of the corporate performance measures and key milestones applicable to the project for FY 1999, FY 2000, and FY 2001. While a significant number of EM's projects have quantifiable corporate performance measures, not all projects have work scope associated with these measures. Examples of the reasons why a project does not contain any corporate measures for the budget profile years include: work on the project has not yet begun; work is in progress and has not yet been completed; and/or the project is for landlord, infrastructure, or construction activities that do not have corporate performance measures. Project-specific key milestones are included for most of our large projects as an additional measure of progress.

The corporate performance measures reflect the FY 1999 year-end results, FY 2000 performance goals based on the appropriation, and FY 2001 performance goals based on the request. The life-cycle EM performance measure quantity estimates also have been updated for each site consistent with the updated life-cycle project and site closure plans.

A. Geographic Site Completions

The Department is implementing strategies to accomplish the EM program vision of completing cleanup at most of EM's remaining geographic sites by 2006. A total of 44 geographic sites remained to be cleaned up as of the beginning of FY 2000. (This number includes the addition of the Waste Isolation Pilot Plant, which is a disposal site. This number does not include 25 Uranium Mill Tailings Radiation Control Act Title II sites that will come under long-term DOE custody after the site licensees complete their cleanups. For FY 2001, DOE has requested authority to remediate one of these sites, the Atlas Site in Moab, Utah.)

A geographic site is considered 'complete' (or at its end state) when:

- 'Legacy' waste (i.e., waste produced by past nuclear weapons production activities, with the exception of high-level waste) has been disposed of in an approved manner;
- Deactivation or decommissioning of all facilities currently in the EM program has been completed, excluding any long-term surveillance and monitoring;
- All releases to the environment have been cleaned up in accordance with agreed-upon cleanup standards;
- Groundwater contamination has been contained, or long-term treatment or monitoring is in place; and
- Nuclear material and spent fuel have been stabilized and/or placed in safe long-term storage.

Geographic Site Completion Progress

In FY 2001, EM plans to complete three geographic sites, increasing the total completed to 74 of the 113 geographic sites in the EM program. These completions reflect all 24 of the Uranium Mill Tailings Remedial Action surface project sites (two of these sites were delisted at the request of the State of North Dakota); all of the 25 Formerly Utilized Sites Remedial Action Project sites (per Congressional direction, the remaining Formerly Utilized Sites Remedial Action Project sites were transferred to the Army Corps of Engineers for remediation at the beginning of FY 1998); and 25 other sites, leaving 39 sites to be cleaned up. The three planned geographic site completions in FY 2001 are:

< Argonne National Laboratory-West in Idaho;

< Grand Junction Office Site in Colorado; and,

< Monticello Remedial Action Project in Utah.

In FY 2000, EM plans to complete the following two geographic sites, increasing the total completed to 71 of 113 geographic sites:

< Columbus Environmental Management Project – King Avenue Site in Ohio; and,

< General Atomics in California.

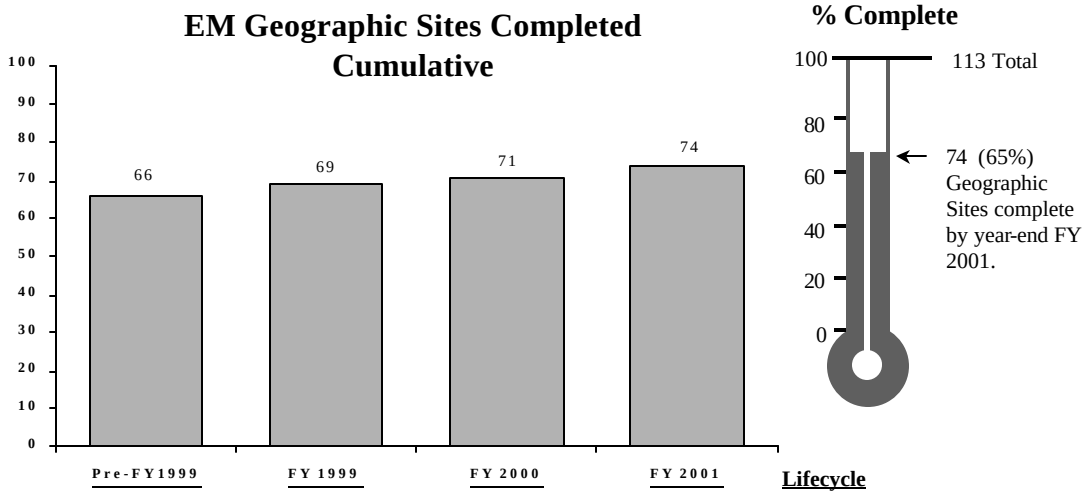
In FY 1999, EM completed the following three geographic sites, increasing the total completed to 69 of 113 geographic sites:

< Ames Laboratory in Iowa;

< Sandia National Laboratory in California; and,

< Princeton Plasma Physics Laboratory in New Jersey.

Geographic Site Completion Progress



End of Year Remaining	47	44	42	39	
Annual Completions	66	3	2	3	113

1. 44 geographic sites remained to be cleaned up at the beginning of FY 2000 (this includes the addition of WIPP which is a disposal site).
2. Completions include two UMTRA sites Belfield and Bowman, ND. The designation of these sites as UMTRA sites was revoked in FY 1998.
3. Excludes 21 FUSRAP sites transferred to the U.S. Army Corps of Engineers in FY 1998.

B. Cleanup Progress

EM has demonstrated and will continue to demonstrate significant cleanup progress through the completion of remediation at numerous "release sites" and "facilities" at the various geographic sites, ultimately leading to the completion of an entire geographic site. Release sites represent discrete areas of contamination at a site, and facilities are contaminated structures. Remedial actions/release site cleanup, facility deactivation, and facility decommissioning are further defined as follows:

Remedial Action/Release Site Cleanup -- Remedial actions are taken to identify and contain or remove soil and groundwater contamination to reduce risks to workers and the environment, and to prevent it from spreading. Remedial action/release site cleanups are conducted at inactive waste sites or facilities where releases or spills have occurred and contamination has been released into the environment. Completion of release site assessments are also tracked to show interim cleanup results.

Facility Deactivation -- Deactivation activities minimize the risks, hazards, and associated costs at facilities and make those facilities available for potential re-use or eventual decontamination and decommissioning. These activities can include material handling and movement. The intent, however, is not to achieve an end point for the material, but to remove the material with the goal of readying the facility/system for the preferred end state.

Facility Decommissioning -- Decommissioning involves the decontamination and/or dismantlement and removal of nuclear facilities that are no longer active and pose a risk to public health or the environment. Decommissioning operations range from small cleanup activities involving portions of buildings to complete structural dismantlement. Completion of facility assessments are also tracked to show interim decommissioning results.

FY 2001 Performance Goals for Cleanup

Release Site Assessments and Cleanups

< Complete 103 release site assessments.

< Complete 166 release site cleanups, increasing the total number of release site cleanups completed to approximately 4,900 out of a total inventory of approximately 9,700 release sites.

Facility Deactivation and Decommissioning

< Deactivate 13 facilities.

< Complete 40 facility decommissioning assessments.

< Decommission 46 facilities, increasing the total number of facilities decommissioned to more than 680 out of a total inventory of approximately 3,300 facilities.

FY 2000 and FY 1999 Cleanup Progress

Release Site Assessments and Cleanups

< Complete 378 release site assessments in FY 2000; and completed 288 release site assessments in FY 1999.

< Complete 252 release site cleanups in FY 2000; and completed 161 release site cleanups in FY 1999.

Facility Deactivation and Decommissioning

< Deactivate 28 facilities in FY 2000; and deactivated 64 facilities in FY 1999.

< Complete 64 facility decommissioning assessments in FY 2000; and completed 109 facility decommissioning assessments in FY 1999.

< Decommission 82 facilities in FY 2000; and decommissioned 92 facilities in FY 1999.

Other significant examples of accomplishments and progress in FY 2001, FY 2000, and FY 1999 in the environmental restoration area include:

Continue multiple environmental restoration activities and groundwater efforts at all major EM sites, including Idaho, Richland, Oak Ride, and Savannah River, which will ensure compliance with the Federal Facility Agreement and other regulatory agreements and permits.

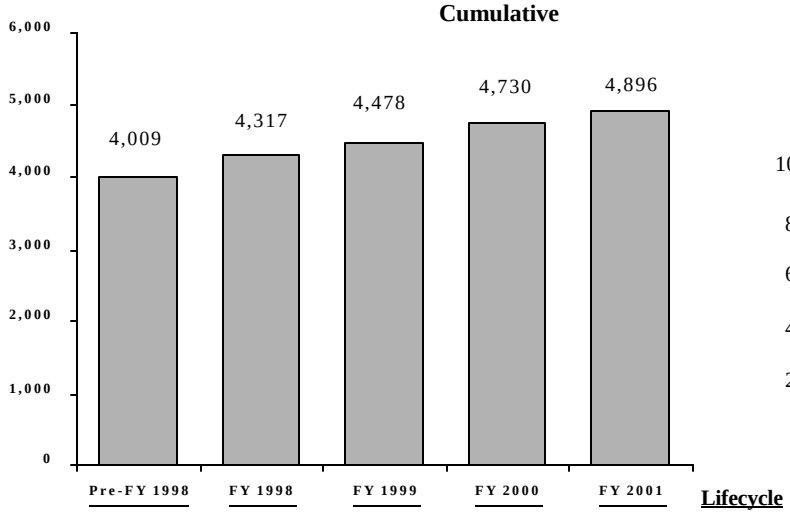
- Finalize in FY 2001 the Lawrence Livermore National Laboratory Site 300 Final Interim Record of Decision which lays out cleanup plans for the entire site.
- Continue multiple environmental restoration activities and groundwater efforts at the Idaho, Richland, and Savannah River sites, which will ensure compliance with the Federal Facility Agreement and other regulatory agreements and permits.
- Complete construction and begin operations of the Oak Ridge Reservation privatized Environmental Management/Waste Management Disposal Facility for the Comprehensive Environmental Response, Compensation, and Liability Act-generated waste streams.
- At the Paducah, Kentucky site implement the Record of Decision for the final remediation of sources contributing to the existing Northeast and Northwest contaminated groundwater plumes.
- Complete placement of contaminated bulk waste and soil in the on-site disposal facility at the Weldon Spring Site in Missouri; continue operation of the groundwater interceptor trench at the quarry.
- Complete remediation for the three remaining major areas at the Pantex, Texas site and delisting of the site from the Environmental Protection Agency National Priorities List in FY 2000.
- Complete the majority of the required remediation at the two large contaminated landfills at Sandia National Laboratory in New Mexico in FY 2000.
- Complete construction of repository cover at Monticello, Utah millsite in FY 2000.
- At the Fernald, Ohio site safe shutdown of all nuclear facilities was completed in FY 1999 and treatment/disposal of facility residues will continue in FY 2000, as will processing, shipping, and disposal of material from the waste pits.
- At the Savannah River Site in South Carolina, 350 million gallons of groundwater will be treated and 100 thousand pounds of volatile organic compounds will be removed in the A/M Area in FY 2000.
- At the Weldon Spring, Missouri site, placement of waste material into the on-site disposal facility continues with over 600 thousand cubic yards of material in FY 1999 and 1.5 million cubic yards in FY 2000.
- At the Paducah Gaseous Diffusion Plant, perform a cleanup effort in FY 1999 dealing with the removal and disposal of 51,000 tons of scrap metal.
- At the Oak Ridge Reservation in Tennessee, cleanup decisions on the remediation approach for the Upper East Fork Poplar Creek groundwater plume was issued in FY 1999; and cleanup decisions for the Bear Creek Valley Watershed will be issued in FY 2000.

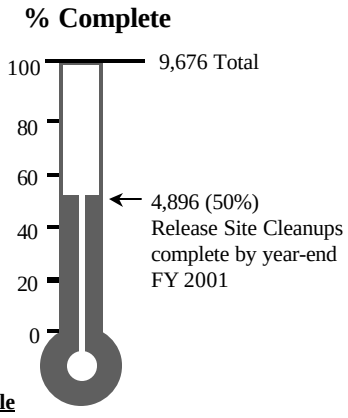
- At the Hanford, Washington site, disposed of approximately 323,000 cubic meters of contaminated materials and low-level waste in FY 1999 and over 175,000 cubic meters projected for FY 2000 into the on-site Environmental Restoration Disposal Facility.
- Completed the installation of 4 deep groundwater monitoring wells for monitoring contaminated groundwater flow from the Nevada Test Site in FY 1999.
- Completed an innovative in-place deactivation of the Old Waste Calcining Facility at the Idaho National Engineering and Environmental Laboratory in FY 1999.

Release Site Cleanup Progress

Release Site Cleanups Completed

Cumulative



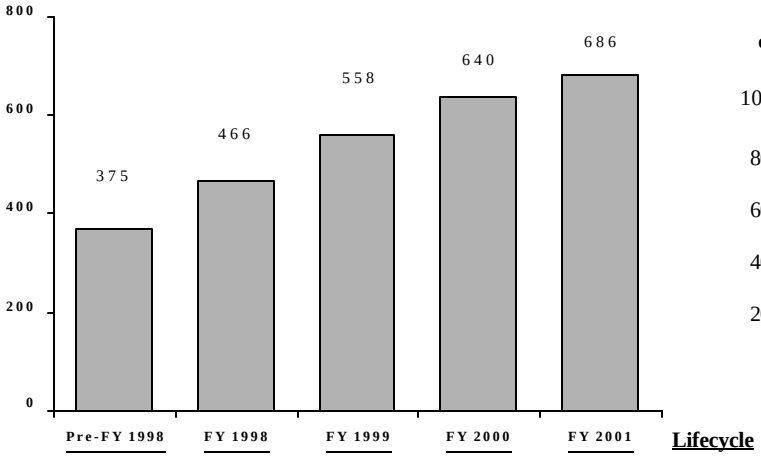


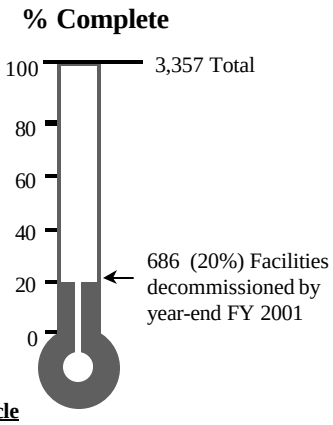
End of Year Remaining	5,667	5,359	5,198	4,946	4,780	
Annual Completions	4,009	308	161	252	166	9,676

Facility Decommissioning Progress

Facilities Decommissioned

Cumulative





End of Year Remaining	2,982	2,891	2,799	2,717	2,671	
Annual Completions	375	91	92	82	46	3, 357

C. Waste Treatment, Storage, and Disposal

The safe treatment, storage, and disposal of waste ensures that these materials do not pose unacceptable risks to the public, workers, or the environment. Waste management activities support completion of EM's geographic sites and will ultimately enable many of EM's sites to be made available for other beneficial uses. Listed below are the long-term and near-term goals for managing the radioactive waste types: high-level waste, transuranic waste, low-level waste, and mixed low-level waste.

High-Level Waste -- High-level waste is highly-radioactive waste material resulting from the reprocessing of spent nuclear fuel, including the liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations, and other highly-radioactive material that is determined, consistent with existing law, to require permanent isolation. The waste is stored largely as liquids, sludges, or salts with some waste in the form of a solid calcine. The long-term objective for high-level waste management is disposal in a licensed geologic repository. High-level waste is made disposal-ready through treatment to produce canisters of vitrified waste. The Department is currently vitrifying liquid high-level waste at the Defense Waste Processing Facility at the Savannah River Site in South Carolina, and the West Valley Demonstration Project in New York. Work will also continue for the privatization of high-level waste treatment at the Hanford Site in Washington and solidification of liquid sodium bearing waste to a calcine form at the Idaho National Engineering and Environmental Laboratory.

Transuranic Waste -- Transuranic waste is radioactive waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste, with half-lives greater than 20 years, except for a) high-level radioactive waste; b) waste that the Secretary of Energy has determined, with the concurrence of the Administrator of the Environmental Protection Agency, does not need the degree of isolation required by the 40 CFR Part 191 disposal regulations; or c) waste that the Nuclear Regulatory Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61. Approximately 98% of DOE's transuranic waste is stored at six major sites: the Los Alamos National Laboratory, the Rocky Flats Environmental Technology Site, the Oak Ridge National Laboratory, the Hanford Site, the Idaho National Engineering and Environmental Laboratory, and the Savannah River Site. The long-term goal is to dispose of all defense-related transuranic waste in the Waste Isolation Pilot Plant in New Mexico. The Department initiated disposal operations at the Waste Isolation Pilot Plant on March 26, 1999.

Mixed Low-Level Waste -- Mixed low-level waste consists of both hazardous (as defined by the Resource Conservation and Recovery Act) and radioactive (as defined by the Atomic Energy Act) components and is not high-level or transuranic waste. The long-term goal for mixed low-level waste is to develop the necessary treatment and disposal capacity needed to dispose of the existing inventory as well as any newly generated waste. The near-term goal for mixed waste is to complete site selection for disposal facilities and optimize the treatment configuration outlined in the site treatment plans.

Low-Level Waste -- Low-level waste is radioactive waste that is not high-level radioactive waste, transuranic waste, spent nuclear fuel, byproduct material (as defined under the Atomic Energy Act of 1954), or naturally occurring radioactive material. Low-level waste is currently disposed at Los Alamos National Laboratory, the Idaho National Engineering and Environmental Laboratory, and the Savannah River Site, Oak Ridge, Nevada, and Hanford sites. The Nevada and Hanford sites also accept low-level waste from other sites in the DOE Complex. The Savannah River Site accepts low-level waste from the Naval Reactors Program. The near-term and long-term goals of the low-level waste management program are to continue to dispose of low-level waste at a pace to eliminate currently stored low-level waste and match generation of new waste.

In addition to the waste type measures listed above, EM also reports the quantity of hazardous waste disposed and the volume of remediation waste disposed. While not EM Corporate Performance Measures, hazardous waste and remediation waste activities are reported in the budget by Project Baseline Summary, where applicable. The low-level waste and mixed low-level waste disposal corporate performance measures *do not* include waste from remedial action activities disposed in Comprehensive Environmental Response Compensation and Liability Act on-site facilities (e.g., Environmental Restoration Disposal Facility at Hanford in Washington; Weldon Spring Site Remedial Action Project in Missouri; and Fernald Environmental Management Project in Ohio).

FY 2001 Performance Goals for Waste Management

Specific performance goals for managing the Department's waste in FY 2001 include:

High-Level Waste

< Produce 205 canisters of high-level waste. By the end of FY 2001, a total of approximately 1,370 canisters of high-level waste will be produced. This completes about 7 percent of the total number of high-level waste canisters that will be produced from FY 1996 to life-cycle completion. In FY 2001, EM expects to produce up to:

S 200 canisters of vitrified high-level waste at the Defense Waste Processing Facility at Savannah River

S 5 canisters of high-level waste at West Valley.

Transuranic Waste

< Ship to the Waste Isolation Pilot Plant in Carlsbad, New Mexico, approximately 3,450 cubic meters of transuranic waste. By the end of FY 2001, a total of more than 4,900 cubic meters of transuranic waste will be shipped to the Waste Isolation Pilot Plant for disposal. This completes about 3 percent of the total volume of transuranic waste (175,600 m^3) that requires disposal between FY 1998 and FY 2034, when waste shipments are scheduled to end.

Mixed Low-Level Waste

- Treat approximately 4,900 cubic meters of mixed low-level waste. By the end of FY 2001, a total of more than 32,000 cubic meters of mixed low-level waste will be treated. This completes about 48 percent of the total volume of mixed low-level waste that requires treatment between FY 1998 and life-cycle completion.
- Dispose of approximately 7,500 cubic meters of mixed low-level waste. By the end of FY 2001, a total of more than 43,000 cubic meters of mixed low-level waste will be disposed. This completes about 18 percent of the total volume of mixed low-level waste that requires disposal between FY 1998 and life-cycle completion.

Low-Level Waste

- Dispose of approximately 27,000 cubic meters of low-level waste. By the end of FY 2001, a total of more than 143,000 cubic meters of low-level waste will be disposed. This completes about 9 percent of the total volume of low-level waste that requires disposal between FY 1998 and life-cycle completion.

FY 2000 and FY 1999 Waste Management Progress

Examples of FY 1999 progress and FY 2000 goals in managing our waste include:

High-Level Waste

- Produce 205 canisters of high-level waste in FY 2000; and produced 248 canisters of high-level waste in FY 1999. Specifically:
  - EM expects to produce up to 200 canisters of vitrified high-level waste at the Defense Waste Processing Facility at Savannah River in FY 2000; and produced 236 vitrified high-level waste canisters in FY 1999.
  - EM expects to produce up to 5 canisters of vitrified high-level waste at the West Valley Demonstration Project in New York in FY 2000; and produced 12 canisters of vitrified high-level waste in FY 1999.

Transuranic Waste

- Ship to the Waste Isolation Pilot Plant approximately 1,200 cubic meters of transuranic waste in FY 2000. Shipped 282 cubic meters of transuranic waste to the Waste Isolation Pilot Plant for disposal in FY 1999.

Mixed Low-Level Waste

- Treat approximately 6,900 cubic meters of mixed low-level waste in FY 2000; treated over 10,000 cubic meters of mixed low-level waste in FY 1999.
- Dispose of approximately 10,000 cubic meters of mixed low-level waste in FY 2000; disposed of over 14,300 cubic meters of mixed low-level waste in FY 1999.

Low-Level Waste

< Dispose of approximately 40,000 cubic meters of low-level waste in FY 2000; disposed of over 49,400 cubic meters of low-level waste in FY 1999.

Other significant examples of FY 1999 accomplishments and FY 2000 goals in managing our waste include:

Began disposal of non-mixed transuranic radioactive waste at the Waste Isolation Pilot Plant in FY 1999, with shipments being received from the Los Alamos National Laboratory, the Idaho National Engineering and Environmental Laboratory, and the Rocky Flats Environmental Technology Site. Shipments from Hanford and Savannah River are scheduled to begin in FY 2000.

The Waste Isolation Pilot Plant received the final Resource Conservation and Recovery Act permit on October 27, 1999, from the State of New Mexico for disposal of mixed transuranic radioactive waste.

Issued the Record of Decision on the Advanced Mixed Waste Treatment Project at Idaho in FY 1999 and authorized the contractor to proceed with construction under a fixed-price privatization contract.

A draft Environmental Impact Statement for the proposed Transuranic Waste Treatment Project at Oak Ridge is expected to be issued in late FY 2000.

Initiated interim stabilization pumping operations in four single-shell high-level radioactive waste storage tanks at Hanford in FY 1999 and continued pumping from three other single-shell tanks.

Completed the first cross-site transfer of 146,000 gallons of high-level radioactive waste at Hanford and initiated retrieval of waste from tank C-106 in FY 1999.

Closed out Defense Nuclear Facilities Safety Board Recommendation 92-4 for use of systems engineering at Hanford in FY 1999; Recommendation 93-5 for waste characterization of high-level radioactive waste storage tanks at Hanford is expected to be closed out in FY 2000.

Select the path forward for processing high-level radioactive waste salts at the Savannah River Site in FY 2000; issue the Record of Decision for the Savannah River High-Level Waste Alternative Salt Process in FY 2000.

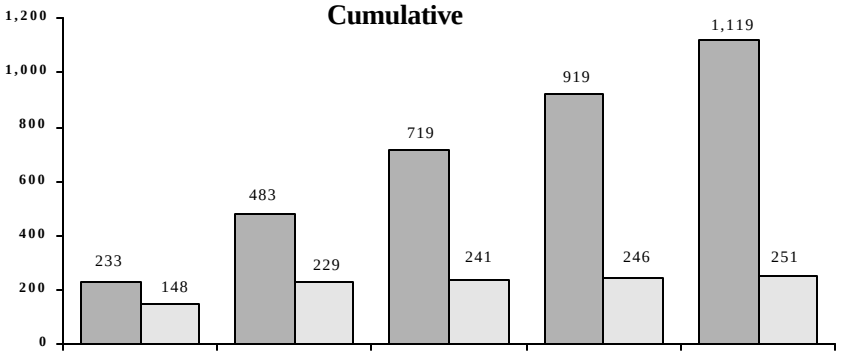
Issue the Record of Decision for high-level waste tank closure at Savannah River in FY 2000.

Transferred approximately 400,000 curies of high-level radioactive waste from the tank farm to the vitrification facility at the West Valley Demonstration Plant in FY 1999; produced an additional 12 high-level radioactive waste canisters at West Valley in FY 1999, bringing the number produced to more than 95% of the total planned.

- Closed Defense Nuclear Facilities Safety Board recommendation 94-2 regarding management of the Department's low-level and mixed low-level waste in early FY 2000 (December 1999).
- Operated the Consolidated Incinerator Facility at Savannah River to treat two million pounds of low-level and mixed low-level radioactive waste in FY 1999.
- Initiate construction of the Idaho Advanced Mixed Waste Treatment Plant in FY 2000.

High-Level Waste Progress

Canisters Produced
Cumulative

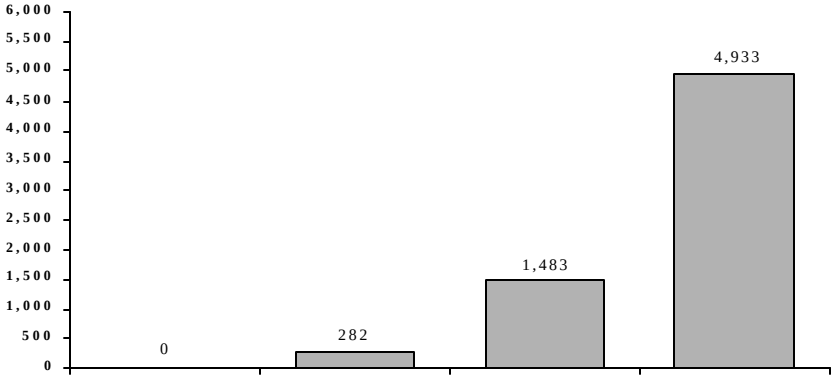


	Pre-FY 1998	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
Savannah River						
End of Year Remaining	5,478	5,228	4,992	4,792	4,592	
Annual Production	233	250	236	200	200	5,711
West Valley						
End of Year Remaining	106	25	13	8	3	
Annual Production	148	81	12	5	5	254
						834 (ID)
						12,245 (RL)
TOTAL:						19,044

NOTE: Lifecycle total includes Idaho (ID) and Richland (RL).

Transuranic Waste Progress

Shipped to WIPP for Disposal (m^3)
Cumulative

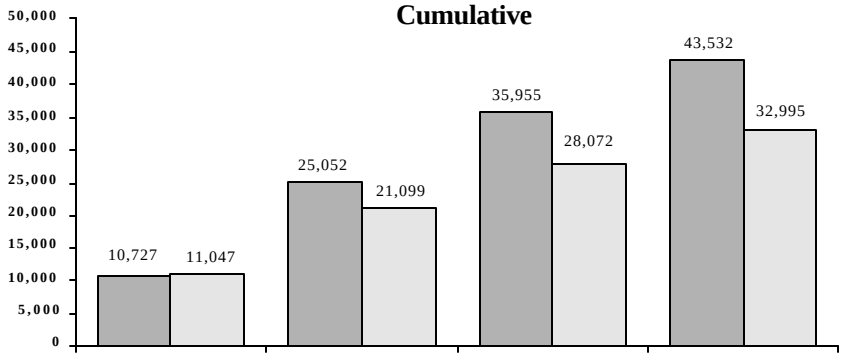


	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	175,600	175,318	174,117	170,667	
Annual Shipped	0	282	1,201	3,450	175,600[1]

[1] Reflects the legal limit for WIPP.

Mixed Low-Level Waste Progress

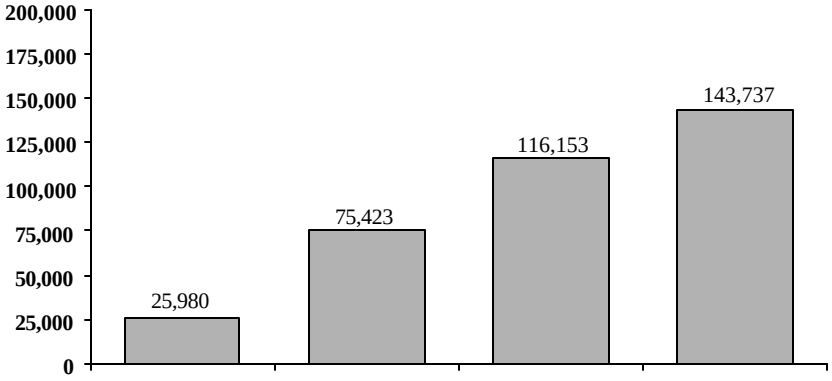
Treatment and Disposal (m^3)
Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
Disposal					
End of Year Remaining	223,916	209,591	198,688	191,111	
Annual Disposed	10,727	14,325	10,903	7,577	234,643
Treatment					
End of Year Remaining	56,682	46,630	39,657	34,734	
Annual Treated	11,047	10,052	6,973	4,923	67,729

Low-Level Waste Progress

Disposal (m^3)
Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	1,540,856	1,491,413	1,450,683	1,423,099	
Annual Disposed	25,980	49,443	40,730	27,584	1,566,836

D. Nuclear Material and Spent Nuclear Fuel Stabilization

Stabilizing, monitoring, and maintaining the large quantity of nuclear material and spent nuclear fuel is one of the most urgent tasks in the EM program. The Department must stabilize these materials and fuel (i.e., produce a safer chemical and/or physical form of the material) to reduce the level of potential risks such as exposure to radiation, contamination of people and the environment, and critical events. Stabilization converts nuclear material to a stable form suitable for storage, either safe interim or long-term depending upon the programmatic plans for the material. Stabilization means that something (processing from a liquid to a solid form, processing to remove activated waste streams, repackaging, etc.) must be done to the nuclear material so that they pose significantly less risk to workers, the public, and/or the environment. Nuclear material will be stabilized at the Plutonium Finishing Plant at Richland, in several facilities at the Rocky Flats Environmental Technology Site, and at the Savannah River Site. These activities have been prioritized so that the most serious risks are addressed first. Milestones have also been developed for the management of spent nuclear fuel including both DOE-owned fuels, as well as foreign research reactor fuels being returned to the United States for non-proliferation purposes. These fuels will be treated, where necessary, packaged suitably for final disposal where practicable, and placed in interim dry storage. Further, as nuclear material and spent fuel are placed in a more stable (i.e., lower risk) form, the physical plant (i.e., buildings, production systems, machinery, and utilities) where the materials had been stored can be deactivated.

The performance measures for nuclear material and spent nuclear fuel focus on the amount of nuclear material *stabilized* and subsequently *made disposition-ready* while awaiting final disposition.

Nuclear Material

- *Stabilization* encompasses activities where the intent is to convert nuclear material to a stable form suitable for storage, either safe interim or long-term, depending upon the programmatic plans for the material. This includes staging, preparation, and operations actions. These actions are taken to both manage and reduce risks. The following types of nuclear material will be reported under "stabilization" and include spent nuclear fuel which requires processing in the Savannah River canyons: Plutonium Solution (liters); Plutonium Residue (kilograms bulk); Plutonium Metal/Oxides (containers); Uranium Solution (liters); Uranium in Other Forms (kilograms bulk); Other Nuclear Material in Solution Form (liters); and Other Nuclear Material in Other Forms (handling units).

- *Material Made Disposition-Ready*. "Disposition-ready" materials are prepared for transportation, long-term storage, or final disposition. The amount of material provided represents the material's post-stabilization (treatment) weight, mass, volume, or number of containers. The following types of nuclear material will be reported under "disposition-ready": Plutonium Metal/Oxides or in Other Forms (containers); Uranium Solution (liters); Uranium in Other Forms (kg bulk); Other Nuclear Material in Solution Form (liters); and Other Nuclear Material in Other Forms (containers).

Spent Nuclear Fuel. Spent nuclear fuel includes fuel, targets, and slugs.

Move to Dry Storage. Reflects the quantity of spent nuclear fuel that is currently stored in vulnerable storage conditions (usually water pools or basins filled) and is moved to dry storage within the reporting period. Examples of spent nuclear fuel in this category include: movement of Three Mile Island-2 spent nuclear fuel from unlined water pool to safer dry storage at Idaho; movement of K-Basins fuel from wet storage to dry storage at the Canister Storage Building at Hanford; and movement of spent nuclear fuel from vulnerable dry wells to safer dry storage at Oak Ridge and Idaho.

Prepare and Ship for Consolidation. Reflects the quantity of spent nuclear fuel that is prepared for shipment and shipped off-site for consolidation purposes. Examples of spent nuclear fuel in this category include: packaging of non-aluminum based fuel at Oak Ridge National Laboratory and shipment of this type of fuel from Idaho to Oak Ridge; and shipment of High Flux Isotope Reactor fuel to Savannah River.

FY 2001 Performance Goals for Nuclear Material Stabilization

Nuclear Material Stabilized

< Stabilize approximately 16,000 kilograms bulk of plutonium residue. By the end of FY 2001, a total of approximately 94,000 kilograms bulk of plutonium residue will be stabilized. This completes about 85 percent of the kilograms bulk of plutonium residue that require stabilization between FY 1998 and life-cycle completion.

< Stabilize approximately 500 containers of plutonium metal/oxides. By the end of FY 2001, a total of approximately 1,200 containers of plutonium metal/oxides will be stabilized. This completes about 17 percent of the plutonium metal/oxides that require stabilization between FY 1998 and life-cycle completion.

< Stabilize approximately 450 handling units of other nuclear material in other forms. By the end of FY 2001, a total of approximately 1,100 handling units of other nuclear materials in other forms will be stabilized. This completes about 5 percent of the handling units of other nuclear material that require stabilization between FY 1998 and life-cycle completion.

FY 2000 and FY 1999 Nuclear Material Stabilization Progress

Examples of FY 1999 progress and FY 2000 goals in managing nuclear material include:

Nuclear Material Stabilized

< Stabilize approximately 41,000 kilograms bulk of plutonium residue in FY 2000; stabilized 31,033 kilograms bulk of plutonium residue in FY 1999.

< Stabilize approximately 400 containers of plutonium metal/oxides/other in FY 2000; stabilized 275 containers of plutonium metal/oxides/other in FY 1999.

< Stabilize approximately 130 handling units of other nuclear material in other forms in FY 2000; stabilized 438 handling units of other nuclear material in other forms in FY 1999.

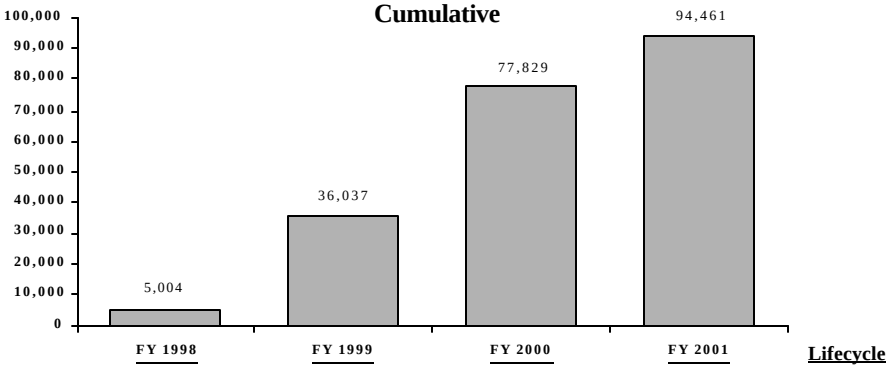
Other significant examples of accomplishments and progress in nuclear material stabilization in FY 2001, FY 2000, and FY 1999 include:

- Begin operations of the bagless transfer system for packaging plutonium bearing materials funded under line-item construction project 98-D-453 at the Hanford Plutonium Finishing Plant in FY 2001.
- In FY 2001, complete the draining and removal of the remaining plutonium-contaminated process piping systems in Building 771; stabilize approximately 16,400 kilograms bulk of plutonium residues; and make disposition-ready approximately 960 containers of plutonium metal/oxides at the Rocky Flats Environmental Technology Site. These metal/oxides containers will continue to be shipped offsite to Savannah River in FY 2001.
- In FY 2000, drain and remove 14 plutonium-contaminated process piping systems in Building 771; stabilize approximately 41,600 kilograms bulk of plutonium residues; and make disposition-ready approximately 720 containers of plutonium metal/oxides at the Rocky Flats Environmental Technology Site. The metal/oxides containers will be shipped off the Rocky Flats Site to Savannah River beginning in FY 2000. This will be the first intersite transfer of this material which is critical to achieving early closure of Rocky Flats.
- All pit shipments from Rocky Flats to Pantex were completed in FY 1999.
- In FY 1999, drained and removed 13 plutonium-contaminated process piping systems in Building 771, and the remaining piping system in Building 371 were drained.
- Restarted plutonium stabilization activities at the Hanford Plutonium Finishing Plant in FY 1999.
- Commence production stabilization of plutonium bearing solutions at Hanford Plutonium Finishing Plant in FY 2000.

Nuclear Material Progress

Plutonium Residue Stabilized (Kg/Bulk)

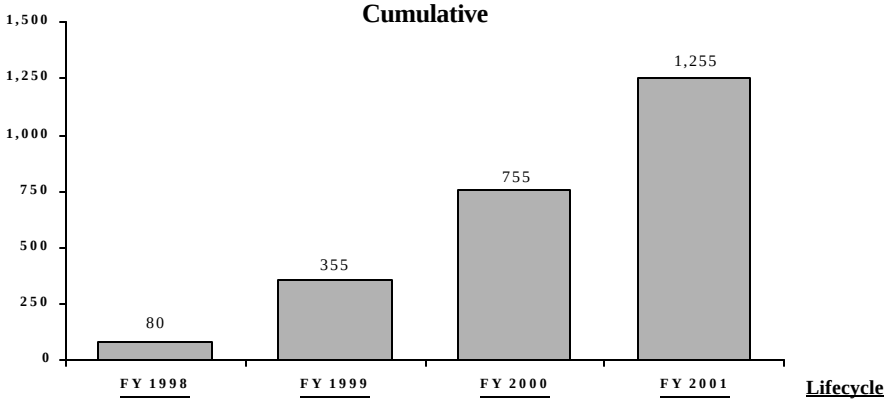
Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	104,942	73,909	32,117	15,485	
Annual Stabilized	5,004	31,033	41,792	16,632	109,946

Plutonium Metal/Oxides Stabilized (Containers)

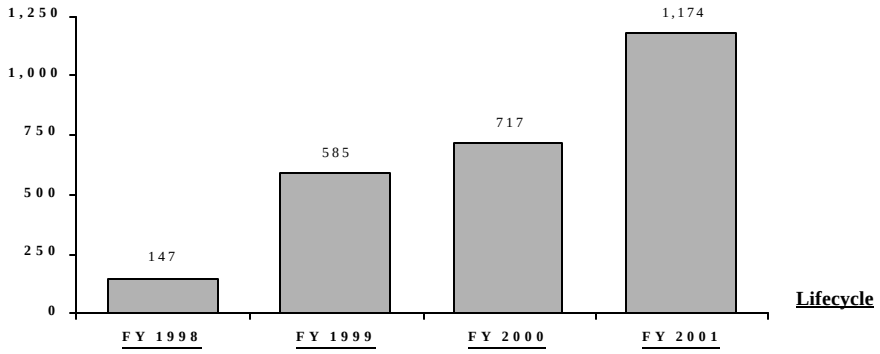
Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	7,296	7,021	6,621	6,121	
Annual Stabilized	80	275	400	500	7,376

Nuclear Material in Other Forms Stabilized (Handling Units)

Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	20,029	19,591	19,459	19,002	
Annual Stabilized	147	438	132	457	20,176

FY 2001 Performance Goals for Spent Nuclear Fuel Stabilization

Spent Nuclear Fuel

< Move 279.57 metric tons of heavy metal of spent nuclear fuel to dry storage. By the end of FY 2001, a total of approximately 315 metric tons of heavy metal of spent nuclear fuel will be moved to dry storage. This completes 14 percent of the metric tons of heavy metal of spent nuclear fuel that will be moved to dry storage between FY 1998 and life-cycle completion.

< Prepare/ship for consolidation 26.32 metric tons of heavy metal of spent nuclear fuel. By the end of FY 2001, a total of approximately 27 metric tons of heavy metal of spent nuclear fuel will be prepared and shipped for consolidation. This completes 51 percent of the metric tons of heavy metal of spent nuclear fuel that will be prepared and shipped for consolidation between FY 1998 and life-cycle completion.

FY 2000 and FY 1999 Spent Nuclear Fuel Stabilization Progress

Examples of FY 1999 progress and FY 2000 goals in managing spent nuclear fuel include:

Spent Nuclear Fuel

< Move 35.07 metric tons of heavy metal of spent nuclear fuel to dry storage in FY 2000; moved 0.34 metric tons of heavy metal of spent nuclear fuel to dry storage in FY 1999.

< Prepare and ship for consolidation 0.1 metric tons of heavy metal of spent nuclear fuel in FY 2000; prepared and shipped for consolidation 0.1 metric tons of heavy metal of spent nuclear fuel in FY 1999.

Other significant examples of accomplishments and progress in spent nuclear fuel stabilization in FY 2001, FY 2000, and FY 1999 include:

Transport 125 assemblies of spent nuclear fuel from the West Valley Demonstration Project in New York to the Idaho National Engineering and Environmental Laboratory for dry storage in FY 2001.

At Hanford, commence K-West Basin fuel removal, drying, and transport to the Canister Storage Building for dry storage in FY 2001.

Complete the transfer of all Three Mile Island spent nuclear fuel into a Nuclear Regulatory Commission-licensed dry storage facility at the Idaho National Engineering and Environmental Laboratory. This successfully meets a high priority Idaho Settlement Agreement milestone in FY 2001.

Start an innovative Privatization project to apply commercial industry expertise and experience to place a variety of spent nuclear fuel at the Idaho National Engineering and Environmental Laboratory in Nuclear Regulatory Commission licensed dry storage in FY 2000.

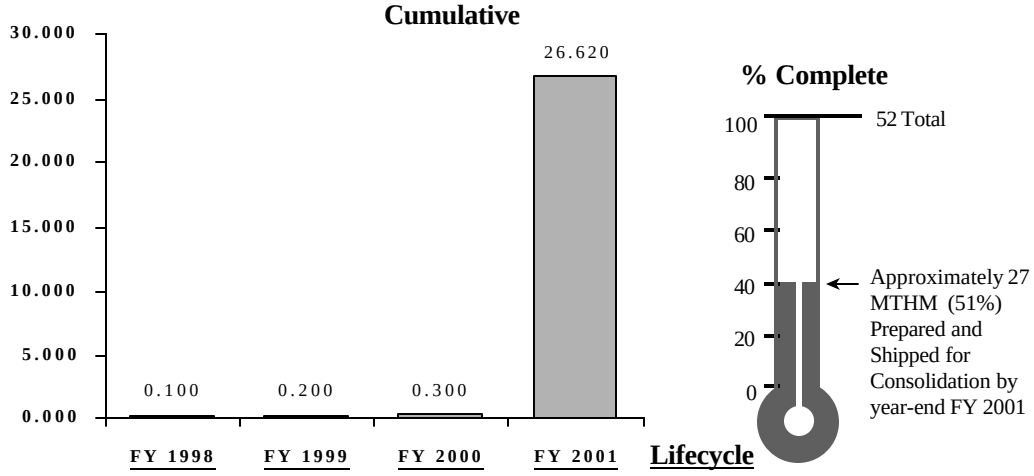
- Completed the first cross-country shipment of foreign research reactor spent nuclear fuel from Europe to the Idaho National Engineering and Environmental Laboratory via the Charleston Naval Weapons Station in FY 1999.

Complete the transfer of spent nuclear fuel from wet storage in the CPP-603 South Basin at the

Spent Nuclear Fuel Progress

Spent Nuclear Fuel Prepared and Shipped for Consolidation (Metric Tons of Heavy Metal)

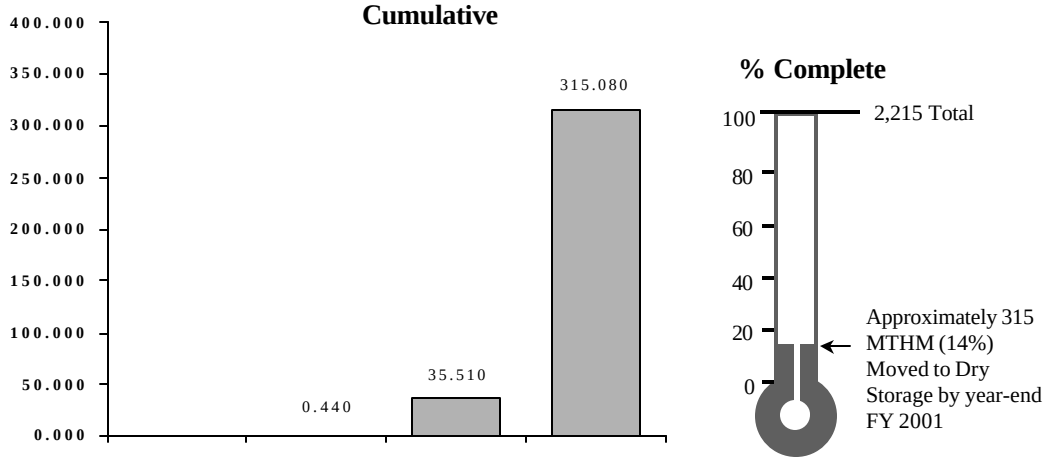
Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	51.900	51.800	51.700	25.380	
Annual Quantity	0.100	0.100	0.100	26.320	52.000

Spent Nuclear Fuel Moved to Dry Storage (Metric Tons of Heavy Metal)

Cumulative



	FY 1998	FY 1999	FY 2000	FY 2001	Lifecycle
End of Year Remaining	2,214.900	2,214.560	2,179.490	1,899.920	
Annual Quntity	0.100	0.340	35.070	279.570	2,215.000

Idaho National Engineering and Environmental Laboratory to improved storage locations by the first quarter of FY 2001.

E. Technology Development and Deployment

EM develops and deploys innovative environmental cleanup technologies that reduce cost, resolve currently intractable problems, and/or are more protective of workers and the environment. The EM technology development effort in FY 2001 concentrates on five major Focus Areas: (1) Mixed Waste; (2) Radioactive Tank Waste; (3) Subsurface Contaminants; (4) Deactivation and Decommissioning; and (5) Nuclear Materials (formerly Plutonium Stabilization) .

The success of the Science and Technology program is currently measured by the:

- Number of innovative technology systems demonstrated that meet the performance-specification-based needs as identified by the Site Technology Coordination Groups.
- Number of innovative technology systems ready for implementation with cost and engineering performance data.
- Number of deployments of innovative technologies in cleanup activities. This is an EM corporate measure shared by the EM user organizations, which are responsible for technology selections. Deployment is the use of a technology or technology system to accomplish one or more site-specific EM program cleanup objectives. The deployments reported in the FY 2001 budget reflect the number of first time innovative technology deployments at a site.

In addition to these measures, the Science and Technology program has developed new "value-added" measures that will also be tracked to assess how well the science and technology investments are managed and how effectively the results of the science and technology activities are being used. The metrics for these three measures are currently being established:

- Number of high priority site needs being addressed by science and technology investments and the successful elimination of those needs in time to meet site schedule requirements;
- Reduction in the programmatic risk (technical risk in particular) associated with the site's critical closure paths and the management of contaminated media, waste streams, and materials identified in the site disposition maps; and,
- Life cycle cost savings as a result of science and technology activities.

These corporate performance measures reflect EM's commitment to measuring the results of investments in science and technology. Some of the implementation details for these measures, particularly the ability to quantify the impact of technology investments on both cost and programmatic risk reduction are still being worked out. As with the program's other measures, the measures for science and technology will continue to be refined and evolve as EM gains experience in using these measures to track and improve program effectiveness and efficiency.

FY 2001 Performance Goals for Technology

Specific performance goals for technology development and deployment for FY 2001 include:

- Accomplish 60 innovative technology deployments.
- Demonstrate 25 innovative technology systems that meet the performance-specification-based needs as identified by the Site Technology Coordination Groups.
- Make 32 innovative technology systems ready for implementation with cost and engineering performance data.

FY 2000 and FY 1999 Technology Progress

Performance goals for technology development and deployment for FY 2000 and FY 1999 include:

- Demonstrate 30 innovative technology systems that meet Site Technology Coordination Group-identified needs in FY 2000; demonstrated 27 innovative technology systems that meet Site Technology Coordination Group-identified needs in FY 1999.
- Make 30 innovative technology systems ready for implementation in FY 2000; 40 innovative technology systems were made ready for implementation in FY 1999.
- Accomplish 60 innovative technology deployments in FY 2000; accomplished 129 innovative technology deployments in FY 1999 (based on the first time deployment at a site).

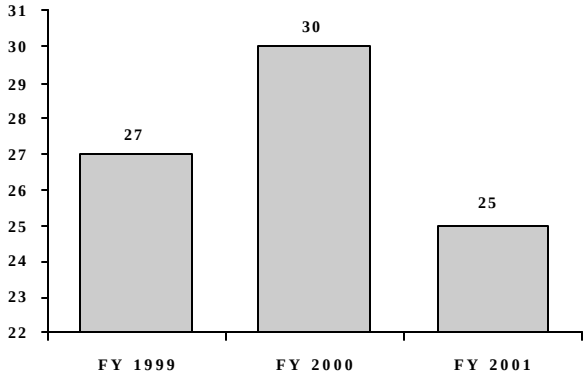
Specific examples of progress in Technology Development and Deployment include:

- Beginning with the FY 2000 budget, established a fully Focus Area-centered approach where all research, development, demonstration, and technical and deployment assistance activities are managed through the established Focus Areas. Lead laboratories have also been assigned to each Focus Area to enhance their technical expertise to become Centers of Excellence.
- Issued scientific research awards in FY 1999 in the areas of subsurface contamination/ vadose zone (31 awards) and effects of low dose radiation (8 awards). Research focused on subsurface contamination/vadose zone issues will assist the Department in addressing problems identified at the Hanford site and other DOE sites with similar problems. Research on the effects of low dose radiation will help to identify potential health and ecological effects from exposures and risks from low dose radiation.
- Completed demonstration during FY 1999, an inexpensive means of reducing the flammable gas concentrations in drums of waste to be shipped to the Waste Isolation Pilot Plant. This process (Hydrogen Gas Getters), to be deployed during FY 2000, enables meeting the limits set forth in the TRUPACT-II Safety Analysis Report and allows larger amounts of waste to be contained in each drum.

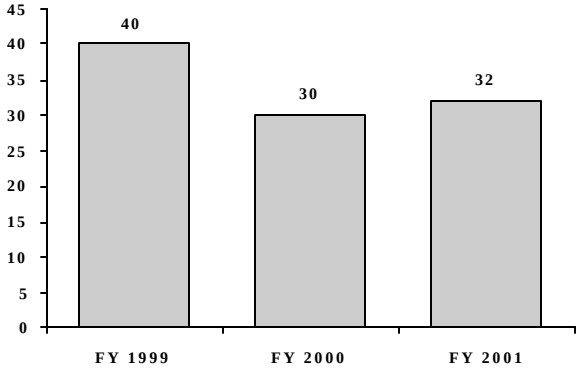
- Complete in FY 2000, demonstration and deployment of innovative technologies for underwater inspection and equipment size reduction, surface characterization and decontamination, structural dismantlement and sludge/debris removal at the Idaho National Engineering and Environmental Laboratory fuel pools.
- In FY 2001, complete the Los Alamos National Laboratory Transuranic Waste Characterization and Disposition Large-Scale Demonstration and Deployment Project. Innovative technologies for characterization, decontamination, size reduction, and packaging of transuranic waste, including plutonium-contaminated gloveboxes will be showcased.
- Demonstrate and deploy in FY 2001, tank waste retrieval technologies enabling continued processing plant feed delivery and tank closure activities at Savannah River, West Valley, Oak Ridge, and Hanford.
- Demonstrate and recommend in FY 2001, designs for the next generation melter for Savannah River and the high-level waste melter for Idaho National Engineering and Environmental Laboratory to reduce costs of processing and enable system design.
- Continue multi-year tasks performed in cooperation with the Environmental Protection Agency to improve landfill caps, cover, and barriers to prevent the migration of wastes from DOE sites. Data from these successful demonstrations will be incorporated into national landfill cover design guidance.
- Disseminated research results from early successes of researchers funded through the EM Science Program. Continue support of quality scientific resources both in the United States and internationally. Scientists that have been funded through the EM Science Program are currently conducting research at 89 universities, 13 DOE laboratories, and 21 other governmental and private laboratories. These are located in 37 States and the District of Columbia, Canada, Australia, Russia, and the Czech Republic. Of the 235 research awards, 126 are collaborative efforts involving funding at two or more institutions.

Technology Development and Deployment Progress

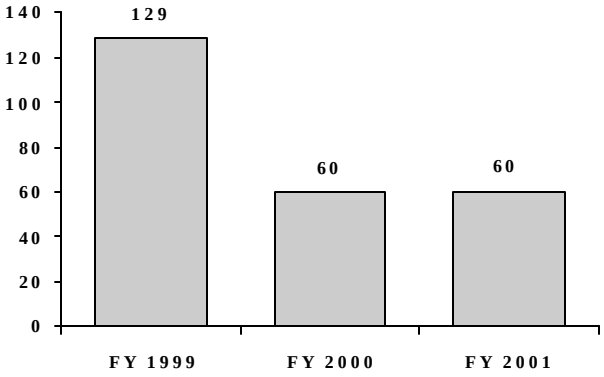
Technologies Demonstrated



Technologies Ready for Implementation



Technology Deployments



Notes: (1) FY 1999 reflects year-end actuals; FY 2000 is based on the Appropriation; and FY 2001 is based on the Request.

F. Pollution Prevention

The mission of the Department's Pollution Prevention Program is to: 1) comply with waste minimization, pollution prevention, affirmative procurement, and recycling requirements under Federal/State statutes, Executive Orders, and DOE Orders; and 2) reduce waste generated through implementation of cost effective pollution prevention projects.

The Department issued aggressive pollution prevention goals for FY 2005 and FY 2010 on November 16, 1999. These goals are to reduce generation of hazardous, radioactive, and sanitary wastes by at least 80 percent by 2010 or earlier, using 1993 as baseline, from its routine operations and achieve a 10 percent reduction annually for wastes from cleanup and stabilization activities. The National Pollution Prevention Program funds Departmental and field activities to comply with Federal/State statutes. The field must fund pollution prevention activities to meet Executive Order requirements and to implement cost effective projects if these goals are to be achieved.

Pollution Prevention Progress

The measures and performance goals provided below are applicable to all Departmental operations. EM will compile and report Department-wide progress in meeting these performance goals.

The Department established the following performance goals for FY 2001:

< Conduct pollution prevention projects/practices to reduce waste from site cleanup and stabilization activities by 10 percent as compared to the annual planned baseline volumes.

The Department established the following performance goals for FY 2000:

< Reduce annual routine waste generation by 50 percent by December 1999, based on 1993 waste generation rates.

< Prepare (triennial) pollution prevention plans outlining specific strategies to meet the new Departmental Pollution Prevention Energy Efficiency goals for 30 DOE sites.

< Conduct pollution prevention projects/practices to reduce waste from site cleanup and stabilization activities by 10 percent as compared to the annual planned baseline volumes and report the results achieved through December 1999 by April 2000.

The Department established the following performance goals for FY 1999:

< Implement projects that reduce/avoid the generation of radioactive, mixed, and hazardous wastes by 2,000 cubic meters. The Department exceeded this goal by implementing pollution prevention projects that avoided 135,000 cubic meters of radioactive, mixed, and hazardous wastes in FY 1999.

< By September 30, 1999, reduce annual routine waste generation by 45 percent based on 1993 waste generation rates. It is expected that the Department met this goal, however, 1999 fiscal year-end results will be available in April 2000.

< Reduce by 10 percent the waste resulting from the execution of cleanup, stabilization and decommissioning activities from the annual planned baseline volumes. As of fiscal year-end

1999, the Department had exceeded this goal by avoiding more than 27,000 cubic meters of waste from its cleanup, stabilization, and decommissioning activities, equivalent to a 16 percent reduction.

G. Corporate Performance Measures - EM Program Totals

This section provides corporate performance measures aggregated to a total EM program level. This summary roll-up is supported by detailed information included within the FY 2001 request that depicts performance measures and goals for FY 1999, FY 2000, and FY 2001. The budget details are provided by appropriation, program account, Operations/Field Office, and Project Baseline Summary. EM plans to continually improve its performance-based budgeting process and the quality of its performance data. Please note the following when reviewing the tables which follow:

Release Sites/Facilities: The sequence and priority in which release sites and facilities at each geographic site are cleaned up vary. The level of effort and resources required to complete EM's release sites and facilities depend upon the urgency, complexity, risk, size of the particular release site and/or facility, and a variety of other factors. Some areas require more characterization and some facilities are much more difficult to cleanup than others. Typically, the simpler release site/facilities are cleaned up first, leaving the more complicated (and generally more costly) activities for later. These more complex areas/facilities may take several years to complete and may also require more time due to resource constraints. Therefore, comparisons between release sites and facility completions both within a particular site, across sites, and from year-to-year, does not provide a good indicator of program progress.

Waste: The waste measures focus on high-level, transuranic, mixed low-level, and low-level waste progress. Hazardous waste and/or other waste accomplishment data are not reflected in these summary tables. However, in most cases, they are included in the supporting budget narratives, where applicable.

Life-Cycle Cost and Life-Cycle Corporate Performance Measure Quantities: The EM life-cycle cost and life-cycle performance measure quantity estimates for each project are provided in section "VII. Ancillary Tables" of this Executive Budget Summary. The "Funding Distribution by Project Baseline Summary" table includes life-cycle costs for each project in current year dollars for fiscal years 1997 through 2070. The "Corporate Performance Measure Quantities by Project Baseline Summary" table provides life-cycle quantities for each project from either FY 1997 (i.e, release sites, facilities, and canisters of high-level waste produced) or FY 1998 (i.e., waste, nuclear material, and spent nuclear fuel) through FY 2070. Because FY 1997 was the year that EM transitioned to the Project Baseline Summaries (PBSs), quantity information *by project* for FY 1997 is not available for each corporate performance measure. Where reliable historical information is available, the Executive Budget Summary includes pre-FY 1997 performance measure quantity data at a summary level only (i.e., not at the project detail level).

The life-cycle (FY 1997 or FY 1998 – 2070) quantities reported at a summary level are supported by the life-cycle quantities reported by PBS. There are a limited number of cases, however, where

the PBS life-cycle quantities are not aligned with the fiscal year quantities reported for that PBS for the budget window years (fiscal years 1999, 2000, and 2001). This is primarily the result of either a PBS restructuring, changes in technical approaches to accomplishing the work scope, or additional ongoing refinements to the life-cycle estimates. In most cases, the magnitude of these differences at a site level is marginal.

Corporate Performance Measures - EM Program Totals [a] [b]

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Release Sites and Facilities				
Number of Completed Release Site Assessments	288	378	103	n/a
Number of Release Site Cleanups	161	252	166	5,764
Number of Completed Facility Decommissioning Assessments	109	64	40	n/a
Number of Facilities Decommissioned	92	82	46	3,078
Number of Facilities Deactivated	64	28	13	1,176
Waste Treatment and Disposal				
Number of High-Level Waste Canisters Produced	248	205	205	18,954
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3) [c]	282	1,201	3,450	175,600
Volume of Mixed Low-Level Waste Treated (m^3)	10,052	6,973	4,923	67,729
Volume of Mixed Low-Level Waste Disposed (m^3)	14,325	10,903	7,577	234,643
Volume of Low-Level Waste Disposed (m^3)	49,443	40,730	27,584	1,566,836
Nuclear Material and Spent Nuclear Fuel				
Nuclear Material Stabilized - Pu Residue (kg bulk)	31,033	41,792	16,632	109,946
Nuclear Material Stabilized - Pu Metal/Oxides (Containers)	275	400	500	7,376
Nuclear Material Stabilized - Other NM Forms (Handling Units)	438	132	457	20,176
Spent Nuclear Fuel Moved to Dry Storage (MTHM)	0.340	35.070	279.570	2,215.000
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.100	0.100	26.320	52.000
Technology Deployments				
Number of Innovative Technology Deployments	129	60	60	n/a

[a] Life-cycle estimates for release sites, facilities, and high-level waste canisters are from fiscal years 1997 through 2070. Waste type, nuclear materials, and spent nuclear fuel estimates are from fiscal years 1998 through 2070.

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

[c] Life-cycle estimate reflects the legal limit for the Waste Isolation Pilot Plant. The WIPP legal limit is provided as the life-cycle estimate since the expectation is that the full capacity at WIPP will be needed to dispose of EM's transuranic waste. Approximately 96,000 cubic meters of transuranic waste has been identified by PBS. Additional large quantities of transuranic waste will result from EM's decontamination and decommissioning activities.

Fiscal Year 1999
Corporate Performance Measures
EM Program Totals (Planned vs. Actual) [a]

	(performance measures)			
	FY 1999 Planned	FY 1999 Actual	Variance	% Variance
Number of Completed Release Site Assessments	313	288	-25	-8%
Number of Release Site Completions	165	161	-4	-2%
Number of Completed Facility Decommissioning Assessments	122	109	-13	-11%
Number of Facilities Decommissioned	81	92	11	14%
Number of Facilities Deactivated	65	64	-1	-2%
Number of High-Level Waste Canisters Produced	215	248	33	15%
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	748	282	-466	-62%
Volume of Mixed Low-Level Waste Treated (m^3)	11,009	10,052	-957	-9%
Volume of Mixed Low-Level Waste Disposed (m^3)	15,591	14,325	-1,266	-8%
Volume of Low-Level Waste Disposed (m^3)	73,520	49,443	-24,077	-33%
Nuclear Material Stabilized - Pu Residue (kg bulk)	32,887	31,033	-1,854	-6%
Nuclear Material Stabilized - Pu Metal/Oxides (containers)	332	275	-57	-17%
Nuclear Material Stabilized - Other Nuclear Material in Other Forms (handling units)	459	438	-21	-5%
Spent Nuclear Fuel Moved to Dry Storage (MTHM)	6.000	0.340	-5.660	-94%
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.100	0.100	0.000	0%
Number of Technology Deployments	60	129	69	115%

[a] See the pages that follow for explanation of variances on this chart which exceed +/-15 percent.

FY 1999 EM Corporate Performance Measure Variance Explanations

Listed below are explanations for variances between the FY 1999 planned and actual results for the EM Corporate Performance Measures reported in the Executive Budget Summary that meet or exceed a +/-15 percent variance threshold. The FY 1999 "planned" data are consistent with performance measures data reported in the FY 2000 Congressional Budget Request.

Waste

Number of High-Level Waste Canisters Produced (+15% variance)

A total of 248 canisters of high-level waste canisters were produced in FY 1999, 33 more than planned. Savannah River Site completed 36 more high-level waste canisters than the planned 200 due to higher than anticipated production rates at the Defense Waste Processing Facility. West Valley produced 12 canisters of high-level waste, three fewer than the 15 planned. An off-normal occurrence at the West Valley Vitrification Facility in early August 1999, which was subsequently resolved in September 1999, resulted in the production of fewer canisters than planned.

Volume of Transuranic Waste Shipped to the Waste Isolation Pilot Plant for Disposal (-62%)

A total of 370 cubic meters of transuranic waste was made disposal-ready and 282 cubic meters of transuranic waste were successfully shipped to the Waste Isolation Pilot Plant for disposal in FY 1999 compared to the 748 cubic meters planned of disposal-ready volumes and shipments to WIPP. The variance in the volume of transuranic waste shipped is primarily the result of the delayed opening of the Waste Isolation Pilot Plant to March 26, 1999, and the additional restriction that DOE only ship non-mixed transuranic waste. The opening of the Waste Isolation Pilot Plant marks the culmination of more than 25 years of effort by the Department to open the nation's first licensed nuclear waste repository and represents a significant accomplishment. (Note that due to outstanding litigation and permitting issues the original FY 1999 transuranic waste shipped goal was adjusted downward to 100 – 200 cubic meters in the FY 1999 Secretary's Performance Agreement with the President). The disposal-ready measure was intended to be a placeholder in the corporate performance measures to show interim progress in the transuranic waste program until WIPP was opened for disposal operations and actual shipments of transuranic waste could be reported. Now that WIPP has opened, this measure will no longer be used to assess progress.

Volume of Low-Level Waste Disposed (-33%)

Nine field offices disposed of a total of more than 49,400 cubic meters of low-level waste, significantly less than the goal of 73,000 cubic meters. Aggressive cleanup plans at Nevada Test Site did not materialize due to the lack of agreement with the State on cleanup standards. In addition, estimated large shipments of previously generated (stored) waste from the Oak Ridge Operations Office to an offsite DOE disposal facility did not occur due to lack of National Environmental Policy Act authority.

Nuclear Material

Plutonium Metals/Oxides Stabilized (-17% variance)

A total of 275 containers of plutonium metals/oxides were stabilized, 57 less than the 332 containers planned. The variance is primarily due to re-sequencing of the stabilization of plutonium metals and oxides at Hanford because of relative risk priorities between the two material types. It was determined that metals should be repackaged only when the repackaging system is available in FY 2000. Therefore, stabilization of oxides began first in FY 1999. This affected the final number of containers stabilized and decreased the expectation from 238 containers to 110 containers at Hanford. The decrease is due to a lower throughput rate for oxide stabilization. The site was able to stabilize 40 more containers than the expected 110. In addition, Savannah River completed stabilization of 125 containers of plutonium metals/oxides.

Spent Nuclear Fuel

Spent Nuclear Fuel Moved to Dry Storage (-94% variance)

The Idaho National Engineering and Environmental Laboratory moved 0.340 of the planned 6.000 metric tons of heavy metal of spent nuclear fuel to dry storage in FY 1999. The primary reason for the variance was a criticality issue discovered in the de-watering system operation that precluded processing Three Mile Island spent nuclear fuel canisters. The restart of unrestricted Three Mile Island operations is expected by February 2000.

Technology

Technology Deployments (+115% variance)

A total of 129 innovative technologies deployments were reported compared to the 60 planned for FY 1999. The number of deployments reported here is based on counting the first time deployment at a site. The favorable technology deployment variance for FY 1999 is primarily due to an increased emphasis on reducing baseline costs and meeting the Accelerating Cleanup: Paths to Closure schedules through the deployment of innovative technologies.

VII. ANCILLARY TABLES

FY 2001 Request versus *Comparable* Prior Years

(dollars in thousands)

	FY 1999 **Comparable** Appropriation	FY 2000 **Comparable** Appropriation	FY 2001 Request
Albuquerque	209,328	207,819	217,163
Carlsbad	185,405	181,417	194,498
Chicago	37,707	37,389	38,827
Idaho	448,591	437,827	451,259
Nevada	80,561	87,741	90,212
Oakland	83,236	77,506	86,482
Oak Ridge	522,311	543,550	620,050
Ohio	497,799	510,975	524,975
Richland	696,623	722,560	726,280
Office of River Protection	310,445	338,457	382,139
Rocky Flats	657,200	664,675	664,675
Savannah River	1,221,946	1,199,865	1,266,884
Multi-Site	59,422	70,772	47,000
Program Direction	355,515	357,806	359,888
Science & Technology	223,215	205,631	196,548
D&D Fund Deposit	398,088	420,000	420,000
U/Th Reimbursement	30,000	30,000	30,000
Subtotal, EM	6,017,392	6,093,990	6,316,880
Use of Prior Year Balances	-39,012	-10,077	-34,317
Dupont Pension Offset	0	-8,700	-50,000
Contractor Travel Savings	0	0	-9,700
Y2K Supplemental	13,840	0	0
D&D Fund Offset	-398,088	-420,000	-420,000
Total, Traditional Budget Authority	5,594,132	5,655,213	5,802,863
Privatization	228,357	188,282	515,000
Total, EM	5,822,489	5,843,495	6,317,863

Environmental Management
Funding by Installation

	(dollars in thousands)		
	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Albuquerque			
Albuquerque Operations Office	10,021	9,379	16,730
Atlas Site	0	0	10,000
Grand Junction Office	44,931	37,355	21,420
Kansas City Plant	1,706	1,742	3,500
Los Alamos National Laboratory	82,717	95,855	96,110
Lovelace Biomedical & Environmental Research Institute	499	537	562
Pantex Plant	11,251	14,829	12,919
Pinellas Plant	2,797	2,787	7,522
Sandia National Laboratories	29,353	24,807	35,000
UMTRA - Groundwater	7,724	12,950	13,400
UMTRA - Surface	12,550	0	0
Total, Albuquerque	203,549	200,241	217,163
Carlsbad	185,405	181,417	194,498
Chicago			
Ames Laboratory	254	260	0
Argonne National Laboratory-East	19,009	19,709	9,564
Argonne National Laboratory-West	1,177	805	611
Brookhaven National Laboratory	30,020	28,439	27,233
Chicago Operations Office	319	1,455	1,419
Princeton Plasma Physics Laboratory	3,143	3,034	0
Total, Chicago	53,922	53,702	38,827
Idaho			
Idaho National Engineering & Environmental Laboratory	431,504	401,968	451,259
Nevada			
Nevada Operations Office	7,702	11,085	11,323
Nevada Test Site	72,379	76,386	78,889
Total, Nevada	80,081	87,471	90,212

	(dollars in thousands)		
	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Oak Ridge			
East Tennessee Tech Park	144,730	146,528	145,955
Oak Ridge National Laboratory	83,398	71,147	72,802
Oak Ridge Off-Site Locations	1,826	3,692	14,442
Oak Ridge Operations Office	13,693	13,770	17,020
Oak Ridge Reservation	113,569	111,202	115,960
Paducah Gaseous Diffusion Plant	35,865	54,203	78,000
Portsmouth Gaseous Diffusion Plant	29,453	46,070	76,200
Weldon Spring Site	67,500	51,801	53,116
Y-12 Plant	25,216	39,395	46,555
Total, Oak Ridge	515,250	537,808	620,050
Oakland			
Energy Technology Engineering Center	16,450	17,159	17,500
General Atomic	2,843	1,092	100
General Electric	0	500	2,000
Laboratory for Energy-Related Health Research	5,589	3,687	6,500
Lawrence Berkeley National Laboratory	9,279	10,904	5,000
Lawrence Livermore National Laboratory	47,665	46,447	50,500
Oakland Operations Office	3,755	1,083	982
Separations Process Research Unit	0	489	2,500
Stanford Linear Accelerator Center	1,250	1,400	1,400
Total, Oakland	86,831	82,761	86,482
Ohio			
Ashtabula	15,405	15,346	16,248
Columbus	12,072	16,073	16,134
Fernald	279,002	274,522	290,793
Miamisburg	83,859	97,998	94,353
Ohio Field Office	237	94	94
West Valley	107,224	106,942	107,353
Total, Ohio	497,799	510,975	524,975
Richland			
Hanford Site	647,735	681,653	683,689
Pacific Northwest National Laboratory	14,620	13,681	14,874
Richland Operations Office	29,229	24,425	27,717
Office of River Protection	310,445	338,457	382,139
Total, Richland	1,002,029	1,058,216	1,108,419

	(dollars in thousands)		
	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Rocky Flats			
Rocky Flats Environmental Technology Site	637,795	646,412	644,623
Rocky Flats Field Office	19,405	18,263	20,052
Total, Rocky Flats	657,200	664,675	664,675
Savannah River			
Savannah River Operations Office	32,328	35,539	25,844
Savannah River Site	1,187,224	1,163,605	1,241,040
Total, Savannah River	1,219,552	1,199,144	1,266,884
D&D Fund Deposit	398,088	420,000	420,000
Uranium/Thorium Reimbursement	30,000	30,000	30,000
Multi-Site	86,677	92,711	47,000
Reprogramming Reserves	0	33,200	0
EH Health Studies	12,000	0	0
Program Direction	337,073	339,409	359,888
Science and Technology	236,715	228,131	196,548
Subtotal, EM	6,033,675	6,121,829	6,316,880
Y2K Supplemental Appropriation	13,840	0	0
Use of Prior Year Balances	-39,012	-3,777	-34,317
Contractor Travel Savings	0	0	-9,700
Dupont Pension (Offset)	0	-8,700	-50,000
D&D Fund Deposit (Offset)	-398,088	-420,000	-420,000
Total, Traditional Budget Authority	5,610,415	5,689,352	5,802,863
Privatization	228,357	188,282	515,000
Total, EM	5,838,772	5,877,634	6,317,863

FY 2001 Request by State

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Alaska	848	1,591	7,281
Arizona	1,934	3,811	8,900
California	86,831	82,705	84,204
Colorado	683,286	688,824	678,740 [a]
Florida	2,797	2,787	7,522
Idaho	432,681	402,773	451,870
Illinois	19,328	21,164	10,983
Iowa	254	260	0
Kentucky	37,065	55,397	79,200
Mississippi	832	551	1,229
Missouri	69,206	53,543	56,616
Nevada	78,006	83,095	80,232
New Jersey	3,143	3,034	0
New Mexico	309,134	312,920	345,338
New York	137,244	135,870	137,086
Ohio	420,028	450,103	493,822
South Carolina	1,219,552	1,199,144	1,266,884
Tennessee	382,432	385,734	412,734
Texas	11,251	14,829	12,919
Utah	35,041	22,027	19,465
Washington	1,002,029	1,058,216	1,108,419
Wyoming	200	0	0
Various Locations:			
Multi-Site	86,677	92,711	47,000
Program Direction	337,073	339,409	359,888
Science & Technology	236,715	228,131	196,548
EH Health Studies	12,000	0	0
Reprogramming Sources	0	33,200	0
D&D Fund Deposit	398,088	420,000	420,000
U/Th Reimbursement	30,000	30,000	30,000
Subtotal, EM	6,033,675	6,121,829	6,316,880
Use of Prior Year Balances	-39,012	-3,777	-34,317
Dupont Pension Offset	0	-8,700	-50,000
Contractor Travel Savings	0	0	-9,700
Y2K Supplemental	13,840	0	0
D&D Fund Offset	-398,088	-420,000	-420,000

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
Total, Traditional Budget Authority	5,610,415	5,689,352	5,802,863
Privatization	228,357	188,282	515,000
Total, EM	5,838,772	5,877,634	6,317,863

Funding Distribution by Appropriation and Program Account

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
Defense Facilities Closure Projects			
Site Closure	1,038,240	1,060,447	1,082,297
Subtotal, Defense Closure	1,038,240	1,060,447	1,082,297
Y2K Supplemental Appropriation	3,500	0	0
Total, Defense Closure	1,041,740	1,060,447	1,082,297
Defense ER&WM			
Post-2006 Completion	2,728,518	2,939,494	3,108,457
Site/Project Completion	1,032,762	971,469	970,951
Program Direction	337,073	339,409	359,888
Science and Technology	236,715	229,413	196,548
Subtotal, Defense ER&WM	4,335,068	4,479,785	4,635,844
Use of Prior Year Balances	-29,447	-3,777	-34,317
Dupont Pension Offset	0	-8,700	-50,000
Y2K Supplemental Appropriation	10,340	0	0
Total, Defense ER&WM	4,315,961	4,467,308	4,551,527
Non-Defense EM			
Post-2006 Completion	90,776	18,850	139,644
Site/Project Completion	101,174	97,385	64,721
Site Closure	248,264	216,115	81,636
Subtotal, Non-Defense EM	440,214	332,350	286,001
Use of Prior Year Balances	-9,565	0	0
Total, Non-Defense EM	430,649	332,350	286,001
UE D&D Fund			
D&D Fund	220,153	249,247	303,038

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
Subtotal, UE D&D Fund	220,153	249,247	303,038
UE D&D Fund Deposit (Offset)	-398,088	-420,000	-420,000
Total, Non-Defense EM	-177,935	-170,753	-116,962
Total EM Traditional BA	5,610,415	5,689,352	5,802,863
Privatization	228,357	188,282	515,000
Total, EM	5,838,772	5,877,634	6,317,863

Environmental Management
Defense Environmental Management Privatization

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
Carlsbad Area Office			
Remote-Handled Transuranic Waste	19,605	0	0
Idaho Operations Office			
Spent Nuclear Fuel Dry Storage	20,000	4,985	25,092
Advanced Mixed Waste Treatment	87,252	109,661	65,000
Subtotal, Idaho	107,252	114,646	90,092
Oak Ridge Operations Office			
On-Site Disposal Facility	33,500	0	0
Transuranic Waste Treatment	0	11,963	0
Subtotal, Oak Ridge	33,500	11,963	0
Office of River Protection			
Tank Waste Remediation System	100,000	105,673	450,000
Subtotal, Defense EM Privatization	260,357	232,282	540,092
Use of Prior Year Balances	-32,000	-44,000	-25,092
Total, Defense EM Privatization	228,357	188,282	515,000

Funding Estimates by Performance Measure [a]

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
Release Sites			
Assessment	101,502	108,124	103,440
Cleanup	548,282	512,052	599,611
Disposal Facility (Design/Construction/Operation)	68,857	58,421	81,421
Groundwater Remediation	97,444	116,241	124,171
Potentially Responsible Party Payments	1,457	2,324	1,705
Post-Remediation Long-Term S&M	13,764	25,117	33,139
Provision of Alternative Water Supply	4,217	4,312	5,530
Facility Decommissioning			
Assessment	17,052	15,787	27,116
Cleanup	204,276	179,836	186,243
Pre-Decommissioning Surveillance & Maintenance	29,890	27,740	26,888
Hazardous Waste			
Construction	1,650	700	700
Disposal	29,789	31,056	26,645
High-Level Waste			
Canisters Produced	30,677	28,100	46,153
Construction	45,339	60,128	107,446
Storage	406,679	399,452	410,823
Treatment (includes TWRS privatization)	402,945	415,459	805,406
Low-Level Waste			
Construction	4,342	2,840	1,000
Disposal	64,098	46,309	80,100
Storage	34,068	47,204	44,310
Treatment	39,854	38,051	31,154
Mixed Low-Level Waste			
Construction	1,170	420	5,188
Disposal	49,388	77,235	62,525
Storage	37,158	45,848	42,120
Treatment	119,977	95,023	101,329

[a] This table presents the total estimated budget authority by performance measure category (e.g., Transuranic Waste, Release Sites, Nuclear Material Stabilization, etc.) and "other" activities (e.g., operational activities, etc.) ***below*** the Project Baseline Summary level. The table reflects only an **estimate** of the budget authority associated with key program activities related to waste management, remediation, facility decommissioning and deactivation, and nuclear material and spent nuclear fuel stabilization. The budget authority provided for these performance measures and "other" activities are estimates only and are therefore not of auditable quality. The total budget authority reported for each Project Baseline Summary in the main line budget is of audit quality consistent with EM's project-based management approach.

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
Transuranic Waste			
Construction	1,234	3,479	1,000
Received for Disposal at WIPP	205,010	181,417	194,498
Shipped to WIPP for Disposal	10,793	11,429	62,112
Storage	94,978	107,836	66,462
Treatment	112,092	153,615	103,332
All Other Waste Types [a]			
All Other Waste Types	84,717	79,541	98,547
Construction	1,032	440	440
Facility Deactivation			
Deactivated During Period	59,486	29,736	47,924
Post-Deactivation Long-Term Monitoring	10,574	13,795	1,239
Surveillance & Maintenance (Not Yet Deactivated/Monitored)	357,853	374,935	391,924
Nuclear Materials			
Construction	71,550	18,550	10,569
Made Disposition Ready	765	320	0
Surveillance & Maintenance	1,920	4,084	9,569
Stabilized	292,041	323,527	318,795
Spent Nuclear Fuel			
Construction	44,180	32,912	0
Moved to Dry Storage	125,050	165,919	182,688
Surveillance & Maintenance	85,609	96,847	92,347
Stabilization	100,999	86,261	107,583
Science & Technology			
Risk Policy	9,000	5,000	2,000
Science Program	45,838	32,000	27,000
Technology	181,877	191,131	167,548
Operational Activities			
Agreements in Principle/Grants	17,999	20,087	19,491
UE D&D Fund Deposit	398,088	420,000	420,000
Landlord	757,119	695,833	675,172
Other Project-Related Bridge Costs	11,804	19,861	9,757
Security Investigations	6,485	9,445	5,691
Technical Program Support	448,913	540,237	470,580
Uranium Leasing	340	400	400
Uranium/Thorium Reimbursement	30,000	30,000	30,000

[a] Includes waste that is not classified as high-level waste, transuranic waste, hazardous waste, low-level waste, or mixed low-level waste.

	FY 1999 Current Appropriation	FY 2000 Current Appropriation	FY 2001 Request
	(dollars in thousands)		
National Programs			
Analytical Management	2,971	2,935	2,700
Emergency Preparedness	3,218	2,789	2,800
Environmental & Regulatory Analysis	518	293	300
Packaging Certification	3,756	3,681	3,700
Pollution Prevention	13,092	7,085	5,550
Program Direction	337,073	339,409	359,888
Transportation & Packaging Management	12,183	11,503	11,203
Subtotal, EM (including Privatization)	6,294,032	6,354,111	6,856,972
Use of Prior Year Balances	-39,012	-3,777	-34,317
Use of Prior Year (Privatization)	-32,000	-44,000	-25,092
Contractor Travel Savings	0	0	-9,700
Dupont Pension (Offset)	0	-8,700	-50,000
Y2K Supplemental Appropriation	13,840	0	0
D&D Fund Deposit (Offset)	-398,088	-420,000	-420,000
Total, EM	5,838,772	5,877,634	6,317,863

EM Corporate Performance Measures [a] [b]
Operations/Field Office Totals

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Albuquerque				
Number of Completed Release Site Assessments	14	10	3	n/a
Number of Release Site Completions	31	17	15	820
Number of Completed Facility Decommissioning Assessments	6	5	2	n/a
Number of Facilities Decommissioned	7	19	3	137
Number of Facilities Deactivated	0	0	0	1
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	191	42	201	9,161
Volume of Mixed Low-Level Waste Treated (m^3)	0	0	0	2
Volume of Mixed Low-Level Waste Disposed (m^3)	144	61	54	656
Volume of Low-Level Waste Disposed (m^3)	0	370	164	33,969
Carlsbad				
Volume of Transuranic Waste Received for Disposal at WIPP [c]	276	1,204	3,450	175,600
Chicago				
Number of Completed Release Site Assessments	13	5	6	n/a
Number of Release Site Completions	9	10	12	120
Number of Completed Facility Decommissioning Assessments	1	2	10	n/a
Number of Facilities Decommissioned	1	9	5	57
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	0	0	95
Volume of Mixed Low-Level Waste Treated (m^3)	11	14	0	137
Volume of Mixed Low-Level Waste Disposed (m^3)	6	32	0	60
Volume of Low-Level Waste Disposed (m^3)	220	12	0	560
Idaho				
Number of Completed Release Site Assessments	61	42	0	n/a
Number of Release Site Completions	22	27	6	173
Number of Completed Facility Decommissioning Assessments	5	3	3	n/a
Number of Facilities Decommissioned	8	4	2	210
Number of Facilities Deactivated	1	0	0	77

[a] Life-cycle estimates for release sites, facilities, and high-level waste canisters are from fiscal years 1997 through 2070. Waste type, nuclear materials, and spent nuclear fuel estimates are from fiscal years 1998 through 2070.

[b] This chart provides a consistent set of high-level performance measures for each operations office in total. The more detailed project-level justification provides a description of significant activities for each project including detailed project performance measures and key project milestones, as applicable.

[c] Life-cycle estimate reflects the legal limit for the Waste Isolation Pilot Plant.

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Number of High-Level Waste Canisters Produced	0	0	0	834
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	26	96	1,160	31,948
Volume of Mixed Low-Level Waste Treated (m^3)	222	200	200	10,291
Volume of Mixed Low-Level Waste Disposed (m^3)	75	52	52	2,556
Volume of Low-Level Waste Disposed (m^3)	4,671	4,000	2,500	87,066
Spent Nuclear Fuel Moved to Dry Storage (MTHM)	0.340	35.070	46.780	93.000
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.100	0.100	0.000	4.000
Nevada				
Number of Completed Release Site Assessments	41	17	7	n/a
Number of Release Site Completions	28	42	52	1,534
Number of Facilities Decommissioned	0	0	0	6
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	0	0	670
Volume of Mixed Low-Level Waste Treated (m^3)	13	0	0	25
Volume of Mixed Low-Level Waste Disposed (m^3)	2	0	1	231
Volume of Low-Level Waste Disposed (m^3)	17,125	14,491	11,072	357,615
Oakland				
Number of Completed Release Site Assessments	9	17	28	n/a
Number of Release Site Completions	12	9	30	195
Number of Completed Facility Decommissioning Assessments	6	3	11	n/a
Number of Facilities Decommissioned	5	5	2	46
Number of Facilities Deactivated	0	0	0	4
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	0	0	50
Volume of Mixed Low-Level Waste Treated (m^3)	445	266	112	432
Volume of Mixed Low-Level Waste Disposed (m^3)	327	178	30	160
Volume of Low-Level Waste Disposed (m^3)	2,324	350	538	775
Oak Ridge				
Number of Completed Release Site Assessments	108	104	35	n/a
Number of Release Site Completions	18	89	28	716
Number of Completed Facility Decommissioning Assessments	14	47	0	n/a
Number of Facilities Decommissioned	6	3	5	208
Number of Facilities Deactivated	2	0	0	9
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	0	0	1,592
Volume of Mixed Low-Level Waste Treated (m^3)	2,472	2,259	1,887	14,926
Volume of Mixed Low-Level Waste Disposed (m^3)	8,033	7,049	5,122	88,024
Volume of Low-Level Waste Disposed (m^3)	1,421	1,152	1,689	73,982
Nuclear Material Stabilized - Other NM Forms (Handling Units)	0	0	0	4

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Ohio				
Number of Completed Release Site Assessments	2	6	15	n/a
Number of Release Site Completions	0	7	9	150
Number of Completed Facility Decommissioning Assessments	14	4	4	n/a
Number of Facilities Decommissioned	13	7	7	161
Number of Facilities Deactivated	10	7	6	139
Number of High-Level Waste Canisters Produced	12	5	5	228
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	0	0	247
Volume of Mixed Low-Level Waste Treated (m^3)	12	247	220	161
Volume of Mixed Low-Level Waste Disposed (m^3)	19	108	108	24
Volume of Low-Level Waste Disposed (m^3)	8,810	850	2,817	1,412
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.000	0.000	26.320	27.000
Richland				
Number of Completed Release Site Assessments	0	167	0	n/a
Number of Release Site Completions	16	41	13	1,418
Number of Facilities Decommissioned	42	14	12	1,325
Number of Facilities Deactivated	51	21	7	750
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	55	55	18,222
Volume of Mixed Low-Level Waste Treated (m^3)	16	1,060	967	33,494
Volume of Mixed Low-Level Waste Disposed (m^3)	182	835	1,052	86,763
Volume of Low-Level Waste Disposed (m^3)	6,080	6,936	4,761	248,203
Nuclear Material Stabilized - Other NM Forms (Handling Units)	0	0	0	442
Nuclear Material Stabilized - Pu Residue (kg bulk)	0	29	0	3,766
Nuclear Material Stabilized - Pu Metal/Oxides (containers)	150	400	500	5,845
Spent Nuclear Fuel Moved to Dry Storage (MTHM)	0.000	0.000	232.790	2,122.000
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.000	0.000	0.000	1.000
Office of River Protection				
Number of Facilities Decommissioned	0	0	0	171
Number of Facilities Deactivated	0	0	0	168
Number of High-Level Waste Canisters Produced	0	0	0	12,245
Volume of Low-Level Waste Disposed (m^3)	0	0	0	251,593
Rocky Flats				
Number of Completed Release Site Assessments	11	0	1	n/a
Number of Release Site Completions	2	0	0	260
Number of Completed Facility Decommissioning Assessments	63	0	10	n/a
Number of Facilities Decommissioned	10	21	10	757
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	65	1,000	2,000	14,870
Volume of Mixed Low-Level Waste Treated (m^3)	5,537	2,538	1,058	n/a
Volume of Mixed Low-Level Waste Disposed (m^3)	5,537	2,538	1,058	52,160

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Volume of Low-Level Waste Disposed (m^3)	0	0	0	1,314
Nuclear Material Stabilized - Pu Residue (kg bulk)	30,864	41,635	16,433	102,145

	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	Life-cycle
Savannah River				
Number of Completed Release Site Assessments	29	10	8	n/a
Number of Release Site Completions	23	10	1	378
Number of Facilities Deactivated	0	0	0	28
Number of High-Level Waste Canisters Produced	236	200	200	5,647
Volume of Transuranic Waste Shipped to WIPP for Disposal (m^3)	0	8	34	19,874
Volume of Mixed Low-Level Waste Treated (m^3)	1,324	389	479	8,261
Volume of Mixed Low-Level Waste Disposed (m^3)	0	50	100	4,009
Volume of Low-Level Waste Disposed (m^3)	8,792	12,569	4,043	510,347
Nuclear Material Stabilized - Pu Residue (kg bulk)	169	128	199	4,035
Nuclear Material Stabilized - Pu Metal/Oxides (Containers)	125	0	0	1,531
Nuclear Material Stabilized - Other NM Forms (Handling Units)	438	132	457	19,730
Spent Nuclear Fuel Prepared & Shipped for Consolidation (MTHM)	0.000	0.000	0.000	20.000

Environmental Management FY 2001 Request
Funding Distribution by Project Baseline Summary

(dollars in thousands)

			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Albuquerque									
AL Ops	AL002	AL Miscellaneous Programs	68,657	26,119	7,248	6,121	7,055	22,114	9/30/2010
AL Ops	---	AL Accounting Adjustments	---	14,425	---	---	---	---	---
AL Ops	AL003	South Valley Superfund Site	6,300	163	0	75	0	6,062	4/30/2003
AL Ops	AL004	New Mexico Agreement in Principle	85,222	1,650	1,980	2,238	1,098	78,256	9/30/2070
Lovelace	AL005	Lovelace Respiratory Research Institute	28,317	1,708	499	537	562	25,011	9/30/1997
KCP	AL007	Kansas City Environmental Restoration Project	233,240	7,345	1,706	1,742	3,500	218,947	9/30/2070
LANL	AL008	Nuclear Material Facility Stabilization R&D	181,108	27,988	11,885	11,188	10,600	119,447	9/30/2016
LANL	AL009	LANL Environmental Restoration	628,492	109,608	45,387	59,003	51,966	362,528	9/30/2009
LANL	AL012	LANL Waste Management - Newly Generated Waste	61,590	55,279	0	0	0	n/a	9/30/1998
LANL	AL013	LANL Waste Management - Legacy Waste	708,993	51,628	18,294	18,805	23,570	596,696	9/30/2013
Pantex	AL014	Pantex Plant Site Remediation Project	96,258	19,922	11,251	14,829	12,919	37,337	9/01/2015
Pantex	AL015	Pantex Waste Operations	22,127	23,006	0	0	0	n/a	9/30/1998
SNL	AL017	Sandia National Laboratories Waste Management	52,186	35,011	0	0	0	n/a	9/30/1998
SNL	AL018	Sandia ER Project	253,304	46,923	29,353	24,807	35,000	117,221	9/30/2035
Pinellas	AL019	Pinellas Plant Close-out & Administration of Post-Employment Benefits	226,227	52,410	501	498	4,062	168,756	9/30/2050
UMTRA	AL020	UMTRA - Surface Remedial Action Project	117,391 [a]	77,010	12,550	0	0	n/a	9/30/1999
GJPO	AL021	Maxey Flats Field Management Project	25,435	16,000	1,200	1,194	1,200	5,841	9/30/2003
GJPO	AL022	Monticello Projects	127,279	41,762	34,800	21,915	9,140	19,662	9/30/2005
UMTRA	AL023	UMTRA Ground Water	143,276	12,691	7,724	12,950	13,400	96,511	9/30/2011
GJPO	AL024	GJO All Other Projects	379,282	30,846	8,931	14,246	5,980	319,279	9/01/2010

[a] Includes uncosted carryover from prior year appropriations that will be costed during or after FY 1997 and is therefore included in the EM baseline cost but is not reflected in the budget authority amounts shown here.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Pinellas	AL025	Pinellas STAR Center Environmental Restoration Project	38,941	11,962	2,296	2,289	3,460	18,934	9/30/2014
KCP	n/a	KCP activities [a]	n/a	7,882	0	0	0	n/a	n/a
LANL	AL026	Off-site Source Recovery Program - Def	7,572	0	540	1,526	1,800	3,706	12/30/2002
LANL	AL027	Nuclear Criticality	n/a	225	0	0	495	n/a	n/a
AL Ops	AL028	Albuquerque Nuclear Materials Stewardship Project Office	73,734	1,474	793	945	1,505	69,017	9/30/2020
LANL	AL029	TA-21 Cleanup	5,000	0	5,000	0	0	0	9/30/1999
LANL	AL030	Land Parcels Transfer at LANL	505,713	0	0	0	4,193	501,520	9/30/2007
LANL	AL031	Long-Term Surveillance and Maintenance Program	2,426,516	0	0	0	5,100	2,421,416	9/30/2070
LANL	AL032	Off-site Source Recovery Program - Non-Def	48,671	975	1,611	5,333	3,981	36,771	9/30/2010
LANL	AL033	Missouri Agreement-in-Principle	TBD	0	0	0	150	TBD	TBD
LANL	AL034	Atlas Site	TBD	0	0	0	10,000	TBD	TBD
LANL	AL035	Transportation and Packaging Management	TBD	0	0	0	6,127	TBD	TBD
LANL	AL036	National Analytical Management Program	TBD	0	0	0	300	TBD	TBD
Subtotal, Albuquerque				674,012	203,549	200,241	217,163		
Carlsbad									
WIPP	CAO-1	WIPP Base Operations	7,638,564	202,616	104,163	108,665	126,401	7,096,719	3/26/2039
WIPP	CAO-2	WIPP Disposal Phase Certification and Experimental Program	1,673,469	85,975	38,005	34,372	29,967	1,485,150	3/26/2039
WIPP	CAO-3	WIPP Transportation	1,393,634	23,382	19,415	18,719	17,881	1,314,237	9/1/2034
WIPP	CAO-4	WIPP TRU Waste Sites Integration and Preparation	2,123,407	49,567	23,822	19,661	20,249	2,010,108	9/1/2039
Subtotal, Carlsbad				361,540	185,405	181,417	194,498		

[a] This scope was transferred to Defense Programs prior to Project Baseline Summary development and is therefore not included in the Project Baseline Summaries.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Chicago									
Ames	CH-AMESRA	Ames Remedial Actions	305 [a]	233	0	0	0	0	9/30/1999
Ames	CH-AMESWO	AMES Waste Operations	1,288 [a]	467	254	260	0	0	10/1/2000
ANL-E	CH-ANLEDD	ANL-E Decontamination & Decommissioning Actions	35,060	4,663	6,979	6,614	5,298	11,506	9/30/2003
ANL-E	CH-ANLEDD-D	ANL-E Decontamination & Decommissioning Actions (Defense)	4,291 [a]	4,075	0	0	0	0	9/30/1999
ANL-E	CH-ANLEPM	ANL-E Program Management (Non-Def)	4,070	2,730	479	652	574	See below [b]	9/30/2003
ANL-E	CH-ANLEPM-D	ANL-E Program Management (Defense)	126 [a]	78	0	0	0	0	9/30/1999
ANL-E	CH-ANLERA	ANL-E Remedial Actions (Non-Def)	25,830	7,290	3,977	4,796	3,692	6,075	9/30/2003
ANL-E	CH-ANLERA-D	ANL-E Remedial Actions (Defense)	1,083 [a]	932	0	0	0	0	9/30/1997
ANL-E	CH-ANLEWO	ANL-E Waste Operations	39,949	20,740	7,574	7,647	0	n/a	9/30/2001
ANL-E	CH-ANLEWO-D	ANL-E Waste Operations - Def	4,900	0	0	0	0	4,900	9/30/2001
ANL-W	CH-ANLWRA	ANL-W Remedial Actions	6,992	3,855	1,177	805	611	544	9/30/2000
ANL-W	CH-ANLWWO	ANL-W Waste Operations	6,761 [a]	6,440	0	0	0	0	9/30/1997
BNL	CH-BRNLBYW	BNL Boneyard Waste	11,763	1,801	1,635	3,076	3,609	1,642	9/30/2002
BNL	CH-BRNLDD	BRNL Decontamination and Decommissioning Actions	37,298	143	3,020	130	5,081	28,924	9/30/2005
BNL	CH-BRNLPM	BNL Program Management	31,855	6,555	3,029	3,003	3,567	15,701	9/30/2006
BNL	CH-BRNLRA	BNL Remedial Actions	179,407	32,659	15,522	15,867	14,976	100,383	9/30/2006
BNL	CH-BRNLWO	BNL Waste Operations	33,160	13,387	6,814	6,363	0	n/a	10/1/2000
CH Ops	CH-CHOOPUAB	Princeton Site A/B Payments	4,052	828	157	955	505	1,607	9/30/2003
CH Ops	CH-CHOOSA	Site A Cleanup	799 [a]	341	0	0	0	0	3/31/1997
CH Ops	CH-CHOOSM	Surveillance and Maintenance Activities	250 [a]	31	0	0	0	0	9/30/1998
CH Ops	CH-CHOOSM-D	Surveillance and Maintenance Activities (Def)	223	434	0	0	0	See below [b]	9/30/1998
CH Ops	CH-COPS	CH Operations Program Support (Non-Def)	1,443	41	162	500	0	740	9/30/2006

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[b] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
CH Ops	CH-COPS-D	CH Operations Program Support (Defense)	54 [a]	20	0	0	0	0	9/30/1999
Fermi	CH-FNALWO	FNAL Waste Operations	1,917	2,100	0	0	0	See below [b]	10/1/1997
CH Ops	CH-NAMP	National Analytical Management Program	TBD	0	0	0	500	TBD	TBD
CH Ops	CH-PP	Pollution Prevention	TBD	0	0	0	283	TBD	TBD
PPPL	CH-PPPLRA	PPPL Remedial Actions	1,920	924	343	260	0	See below [b]	9/30/1999
PPPL	CH-PPPLWO	PPPL Waste Operations	14,812	6,065	2,800	2,774	0	See below [b]	10/1/2000
CH Ops	CH-TM	Transportation and Packaging Management	TBD	0	0	0	131	TBD	TBD
Subtotal, Chicago				116,832	53,922	53,702	38,827		
Idaho									
INEEL	ID-CTREXC-101	LLW/MLLW Center of Excellence	14,460	498	395	0	0	13,567	9/30/2006
INEEL	ID-ER-101	Test Area North Remediation	111,482	14,508	3,855	5,954	9,982	77,183	9/30/2026
INEEL	ID-ER-102	Test Reactor Area Remediation	13,016	2,815	2,509	562	884	6,246	9/30/2026
INEEL	ID-ER-103	Idaho Chemical Processing Plant Remediation	896,987	5,263	8,711	10,523	19,802	852,688	9/30/2070
INEEL	ID-ER-104	Central Facilities Area Remediation	22,886	6,251	897	1,468	1,636	12,634	9/30/2027
INEEL	ID-ER-105	Power Burst Facility/Auxiliary Reactor Area	27,092	2,383	1,097	2,286	3,026	18,300	9/30/2031
INEEL	ID-ER-106	Radioactive Waste Management Complex Remediation	2,104,612	43,274	23,948	1,891	31,047	2,004,452	9/30/2054
INEEL	ID-ER-107	Pit 9 Remediation	TBD	51,827	970	5,912	2,434	See below [b]	2/28/2001
INEEL	ID-ER-108	Sitewide Monitoring Area Remediation	339,071	8,908	3,611	3,048	2,572	320,932	9/30/2026
INEEL	ID-ER-109	Remediation Operations	949,628	43,304	17,122	15,557	19,875	853,770	9/30/2070
INEEL	ID-ER-110	Decontamination & Decommissioning	814,048	10,647	9,747	3,651	6,182	783,821	9/30/2044
INEEL	ID-HLW-101	High-Level Waste Pretreatment	1,071,183	75,286	38,863	46,692	40,311	870,031	9/30/2014
INEEL	ID-HLW-102	High-Level Waste Immobilization Facility	3,931,806	0	0	0	0	3,931,806	9/30/2023
INEEL	ID-HLW-103	High-Level Waste Treatment and Storage	3,226,154	26,509	12,632	18,958	21,008	3,147,047	9/30/2037

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[b] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
INEEL	ID-HLW-104	Vitrified HLW Storage	67,696	0	0	0	0	67,696	9/30/2070
INEEL	ID-HLW-105	Closure and Stabilization Activities	133,940	0	2,538	5,274	2,567	123,561	9/30/2017
INEEL	ID-LRP-101	Environmental Engineering & Science Center	8,061	8,000	61	0	0	0	9/30/1999
INEEL	ID-LRP-101-PC	Environmental Engineering & Science Center (Site/Project Completion)	84,739	0	8,939	0	0	75,800	9/30/2004
INEEL	ID-NAMP	National Analytical Management Program	TBD	0	0	0	750	TBD	TBD
INEEL	ID-OIM-101	Site-Wide Landlord Operations	6,691,400	49,737	29,365	28,114	30,339	6,553,845	9/30/2070
INEEL	ID-OIM-102	ICPP Non-Process Plant Operations	7,753,871	104,658	59,190	54,367	55,957	7,479,699	9/30/2070
INEEL	ID-OIM-103	INEEL Medical Facility	526 [a]	263	0	0	0	0	10/1/1997
INEEL	ID-OIM-104	INEEL Emergency Response Facilities	1,495 [a]	747	0	0	0	0	2/1/1999
INEEL	ID-OIM-105	Security Facilities Consolidation Project	10,782 [a]	5,823	840	0	0	0	5/1/1999
INEEL	ID-OIM-106	Electrical & Utility Systems Upgrade Project, ICPP	57,008	29,267	13,584	12,879	905	373	12/1/2002
INEEL	ID-OIM-107	INEEL Electrical Distribution Upgrade	9,967	9,967	90	0	0	See below [b]	8/31/2000
INEEL	ID-OIM-108	INEEL Road Rehabilitation	11,400	600	8,079	2,716	0	5	6/29/2001
INEEL	ID-OIM-109	Health Physics Instrument Laboratory	12,669	0	1,049	5,110	4,420	2,090	12/30/2002
INEEL	ID-OIM-110	Pre-FY 2007 Surplus Facility Deactivation Project	103,882	17,554	8,724	0	2,859	74,745	9/30/2006
INEEL	ID-OIM-110-N	Pre-FY 2007 Surplus Facility Deactivation Project (Non-Defense)	5,327	2,135	4,638	698	214	See below [b]	9/30/2006
INEEL	ID-OIM-111	Post-FY 2006 Surplus Facilities Deactivation Projects	107,789	0	0	0	0	107,789	9/30/2050
INEEL	ID-OIM-112	Pre-2007 INEEL Surveillance and Maintenance	39,110	7,203	2,109	2,086	4,087	23,625	9/30/2006
INEEL	ID-OIM-112-N	Pre-2007 INEEL Surveillance and Maintenance (Non-Def)	6,283	3,134	1,303	1,600	1,642	See below [b]	9/30/2006
INEEL	ID-OIM-113	Post-2006 Surveillance, Maintenance, and Monitoring	46,930	0	0	0	0	46,930	9/30/2055

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[b] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
INEEL	ID-OIM-114	Sitewide INEEL Information Network	31,946	0	0	50	0	31,896	1/31/2005
INEEL	ID-OIM-115	Site Operations Center	11,900	0	0	106	0	11,794	7/2/2004
INEEL	ID-OIM-116	Environmental Legacy Compliance (VCO)	173,320	0	0	9,077	9,757	154,486	9/30/2017
INEEL	ID-OIM-117	Cathodic Protection System Expansion	6,875	0	0	0	584	6,291	9/30/2004
INEEL	ID-OIM-119	INEEL Roof Replacements	TBD	0	0	0	0	TBD	TBD
INEEL	ID-PP	Pollution Prevention	TBD	0	0	0	283	TBD	TBD
INEEL	ID-SC-101-LT	Validation and Verification Program (Post 2006)	TBD	0	0	0	18,692	TBD	TBD
INEEL	ID-SC-101-PC	Validation and Verification Program (Site/Project Completion)	TBD	0	0	0	2,308	TBD	TBD
INEEL	ID-SNF-101	National Spent Nuclear Fuel Program	305,224	41,796	26,292	17,316	18,238	201,582	9/15/2015
INEEL	ID-SNF-102	Integrated SNF Program	834,387	41,071	8,224	7,289	15,179	762,624	9/30/2035
INEEL	ID-SNF-103	Emptied SNF Facilities	2,098,700	48,277	38,930	42,689	39,209	1,929,595	9/30/2035
INEEL	ID-SNF-104	Constructed New Facilities	TBD	2,152	0	0	0	0	TBD
INEEL	ID-SNF-104-N	Constructed New Facilities (Non-Def)	12,282	8,782	0	3,500	0	0	9/30/2002
INEEL	ID-TM	Transportation and Packaging Management	TBD	0	0	0	764	TBD	TBD
INEEL	ID-WM-101	INEEL LLW/MLLW/Other Waste Program	227,699	51,928	25,442	26,636	26,655	97,038	9/30/2006
INEEL	ID-WM-102	National LLW Program	35,505	8,574	4,042	595	0	22,294	9/30/2006
INEEL	ID-WM-103	INEEL Transuranic Waste	306,215	60,698	37,354	46,994	44,230	116,939	9/30/2006
INEEL	ID-WM-105	AMWTP Production Operations	477,159	6,012	8,904	1,357	653	460,233	12/31/2018
INEEL	ID-WM-106	INEEL Site-Wide Environmental Protection	698,069	13,250	7,137	6,740	7,480	663,462	9/30/2050
INEEL	ID-WM-107	Long-Term Treatment/Storage/Disposal Operations	1,592,846	0	0	0	0	1,592,846	9/30/2050
INEEL	ID-WM-108	Integrated Waste Operations Program	86,569	21,857	9,805	9,765	4,143	40,999	9/30/2006
INEEL	n/a	Accounting Adjustment	-----	610	-----	-----	-----	-----	-----
INEEL	HQNP-SI01-LT-ID	Security Investigations	27,527	0	508	508	585	25,926	TBD
Subtotal, Idaho				835,568	431,504	401,968	451,259		
Nevada									
NTS	NV202	Agreements in Principle/Grants	81,974	5,141	3,473	7,196	4,831	61,333	9/30/2070
NTS	NV211	Soils	171,855	15,740	1,072	1,222	846	152,975	9/30/2007
NTS	NV212	Underground Test Area (UGTA)	922,698	36,302	30,863	31,335	33,936	790,262	9/30/2070

			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
NTS	NV214	Industrial Sites	309,178	20,506	13,107	13,992	15,877	245,696	9/30/2014
NV Ops	NV240	Off-sites	240,580	13,258	7,702	11,085	11,323	197,212	9/30/2070
NTS	NV350	TRU/Mixed TRU	58,525	6,655	6,105	5,614	6,632	33,519	9/30/2009
NTS	NV360	Mixed Low-Level Waste	10,584	677	744	1,244	677	7,242	9/30/2010
NTS	NV370	Low-Level Waste	441,746	18,965	4,329	5,347	5,721	407,384	9/30/2070
NTS	NV400	Program Integration	525,895	24,718	12,686	10,436	10,157	467,898	9/30/2070
NTS	NV401	Pollution Prevention	TBD	0	0	0	212	TBD	TBD
Subtotal, Nevada				141,962	80,081	87,471	90,212		
Oakland									
LLNL	OK-001	LLNL Main Site Remediation	153,343	23,287	13,972	9,708	0	106,376	9/30/2015
LLNL	OK-001-LT	LLNL Main Site Remediation (Post 2006)	TBD	0	0	0	11,613	TBD	TBD
LLNL	OK-002	LLNL Site 300 Remedial Action	206,355	21,947	7,383	10,985	0	166,040	9/30/2030
LLNL	OK-002-LT	LLNL Site 300 Remedial Action (Post 2006)	TBD	0	0	0	11,919	TBD	TBD
LBNL	OK-003	LBNL Soils and Groundwater (Envir Restor)	77,635	5,987	3,500	3,382	3,500	61,266	9/30/2032
LBNL	OK-004	LBNL Hazardous Waste Handling Facility Closure (Envir Restor)	631	657	0	0	0	See below [a]	3/1/1998
SLAC	OK-005	Stanford Linear Accelerator Center (Environ. Restor.)	7,390	2,001	1,250	1,400	1,400	1,339	9/30/2002
ETEC	OK-007	ETEC Remediation	123,255	24,359	10,874	10,047	0	77,975	9/30/2007
ETEC	OK-007-D	ETEC Remediation (Defense)	TBD	1,760	500	0	0	See below [a]	9/30/2007
ETEC	OK-007-LT	ETEC Remediation (Post 2006)	TBD	0	0	0	9,300	TBD	TBD
ETEC	OK-009	ETEC Landlord	39,178	4,000	2,280	3,632	0	29,266	9/30/2007
ETEC	OK-009-LT	ETEC Landlord (Post 2006)	TBD	0	0	0	4,700	TBD	TBD
LEHR	OK-010	LEHR Environmental Restoration	31,359	9,115	4,030	2,985	5,500	9,729	9/30/2006
GTF	OK-011	Soil Remediation (GTF)	1,300 [b]	1,000	0	0	0	0	12/1/1996
GA	OK-012	Hot Cell Facility D&D at General Atomics	12,810	7,880	2,843	1,092	100	895	9/30/2005

[a] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

[b] This includes uncosted carryover from prior year appropriations that will be costed during or after FY 1997 and is therefore included in the EM baseline cost but is not reflected in the budget authority amounts shown here.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
GE	OK-013	General Electric D&D (Environ. Restoration)	22,613	0	0	500	0	22,113	9/30/2007
GE	OK-013-LT	General Electric D&D (Environ. Restoration) (Post 2006)	TBD	0	0	0	2,000	TBD	TBD
LEHR	OK-014	LEHR Waste Management	9,416	1,694	1,559	702	1,000	4,461	9/30/2004
LBNL	OK-015	LBNL Legacy Waste	7,119	399	839	1,490	1,500	2,891	9/30/2003
LBNL	OK-016	LBNL Newly Generated Wastes	28,766	10,970	4,940	6,032	0	6,824	9/30/2000
LLNL	OK-021	LLNL Base Program	156,962	41,793	19,418	20,375	0	75,376	9/30/2003
LLNL	OK-021-LT	LLNL Base Program (Post 2006)	TBD	0	0	0	23,268	TBD	TBD
LLNL	OK-026	LLNL General Plant Projects	5,570	875	1,410	1,657	0	1,628	9/30/2003
LLNL	OK-026-LT	LLNL General Plant Projects (Post 2006)	TBD	0	0	0	900	TBD	TBD
LLNL	OK-027	LLNL Decontamination & Waste Treatment Facility	29,328	20,750	4,752	2,000	2,000	See below [a]	3/1/2003
OK Ops	OK-040	Program Management and State Grants	3,987	1,589	0	300	90	2,008	9/30/2032
OK Ops	OK-040LT	Program Management and State Grants (Post 2006)	TBD	0	0	0	10	TBD	TBD
OK Ops	OK-040-D	Program Management and State Grants (Defense)	20,421	5,986	3,755	783	0	9,897	9/30/2032
OK Ops	OK-040D-LT	Program Management and State Grants (Defense) (Post 2006)	TBD	0	0	0	350	TBD	TBD
OK Ops	---	OK Accounting Adjustment	---	2,453	---	---	---	---	---
LLNL	OK-041	Accelerated Waste Treatment	7,823	3,253	730	1,722	0	See below [a]	9/30/1999
LLNL	OK-041D-LT	Accelerated Waste Treatment (Defense) (Post 2006)	TBD	0	0	0	800	TBD	TBD
ETEC	OK-042	ETEC Waste Management	37,805	6,090	2,796	3,480	0	25,439	9/30/2007
ETEC	OK-042LT	ETEC Waste Management (Post 2006)	TBD	0	0	0	3,500	TBD	TBD
SPRU	OK-043	Separations Process Research Unit	241,837	0	0	489	0	241,348	9/30/2014
SPRU	OK-043LT	Separations Process Research Unit (Post 2006)	TBD	0	0	0	2,500	TBD	TBD
OK Ops	OK-PP	Pollution Prevention	TBD	0	0	0	532	TBD	TBD
Subtotal, Oakland				197,845	86,831	82,761	86,482		

[a] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

(dollars in thousands)

			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date

			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Oak Ridge									
FUSRAP	FUSRAP	Formerly Utilized Sites Remedial Action Project [a]	n/a	73,970	0	0	0	n/a	n/a
ORR	OR-151	ORR Legacy Waste	1,001,784	145,127	84,165	88,578	94,356	589,558	9/30/2070
ORR	OR-171	Environmental Management Waste Mgmt Facil	155,281	0	3,630	3,907	12,323	135,421	9/30/2015
ORR	OR-191	Non-Recurring Contractor Transition - Def	184,085	0	8,933	12,134	5,476	157,542	9/30/2070
ORR	OR-192	Non-Recurring Contractor Transition - Non-Def	4,364	0	3,137	0	0	1,227	9/30/1999
ORR	OR-193	Non-Recurring Contractor Transition - D&D Fund	130,072	0	13,704	6,583	3,805	105,980	9/30/2070
Y-12	OR-211	Y-12 Waste Operations	189,420	44,489	17,866	26,384	27,047	73,634	9/30/2070
Y-12	OR-221	Y-12 Remedial Action	456,329	31,249	3,270	7,547	13,242	401,021	9/30/2013
Y-12	OR-231	Y-12 Decontamination & Decommissioning	37,439	0	0	0	0	37,439	9/30/2007
Y-12	OR-241	Y-12 Surveillance & Maintenance	925,230	10,735	4,080	5,464	6,266	898,685	9/30/2070
ORNL	OR-311	ORNL Waste Operations - Def	152,973	41,238	5,048	16,612	11,048	79,027	9/30/2070
ORNL	OR-312	ORNL Waste Operations - Non-Def	34,714	17,230	13,064	0	0	4,420	10/1/1999
ORNL	OR-321	ORNL Remedial Action - Def	402,278	11,665	0	24,439	20,610	345,564	2/4/2013
ORNL	OR-322	ORNL Remedial Action - Non-Def	43,557	49,598	23,465	1,345	0	See below [b]	9/30/1999
ORNL	OR-331	ORNL Decontamination & Decommissioning - Def	235,293	9,586	0	12,871	28,046	184,790	12/7/2007
ORNL	OR-332	ORNL Decontamination & Decommissioning - Non-Def	40,126	17,748	25,343	0	0	See below [b]	9/30/1999
ORNL	OR-341	ORNL Surveillance & Maintenance - Def	1,439,240	0	0	9,232	8,985	1,421,023	9/30/2070
ORNL	OR-342	ORNL Surveillance & Maintenance - Non-Def	14,683	7,363	8,232	0	0	See below [b]	9/30/1999
ORNL	OR-381	ORNL Nuclear Materials & Facilities Stabilization - Def	41,614	5,081	3,558	4,080	4,113	24,782	9/30/2005

[a] This scope of this project was transferred to the Army Corps of Engineers prior to EM creating Project Baseline Summaries, and is therefore not included in the list of projects and has no associated life-cycle cost or project end-date.

[b] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
ORNL	OR-382	ORNL Nuclear Materials & Facilities Stabilization - Non-Def	31,539	20,521	4,688	2,568	0	See below [b]	9/30/1999
ETTP	OR-411	ETTP Waste Operations - Def	255,469	90,782	31,392	31,834	25,035	76,426	9/30/2010
ETTP	OR-423	ETTP Remedial Action - D&D Fund	256,400	40,331	4,837	18,075	22,193	170,964	1/18/2011
ETTP	OR-431	ETTP Decontamination & Decommissioning - Def	17,696	2,423	2,362	0	0	12,911	9/28/2004
ETTP	OR-433	ETTP Decontaination & Decommissioning - D&D Fund	352,493	24,253	21,025	5,394	10,732	291,089	5/15/2007
ETTP	OR-441	ETTP Surveillance & Maintenance - Def	251,962	17,125	5,680	8,720	9,575	210,862	9/30/2070
ETTP	OR-443	ETTP Surveillance & Maintenance - D&D Fund	311,502	59,736	28,552	13,103	17,150	192,961	9/30/2070
ETTP	OR-493	ETTP - ORO Prime Contracts	309,965	24,820	50,882	69,402	61,270	103,591	12/31/2003
Paducah	OR-523	Paducah Remedial Action	479,690	36,033	15,942	23,078	36,726	367,911	9/30/2011
Paducah	OR-543	Paducah Surveillance & Maintenance	719,318	4,662	6,011	13,227	10,269	685,149	9/30/2070
Paducah	OR-553	Paducah Waste Management	243,808	36,345	13,912	17,898	31,005	144,648	9/30/2012
Portsmouth	OR-623	Portsmouth Remedial Action	132,922	32,116	10,413	24,448	53,825	12,120	9/30/2007
Portsmouth	OR-643	Portsmouth Surveillance & Maintenance	1,471,731	9,339	3,601	7,182	9,361	1,442,248	9/30/2070
Portsmouth	OR-653	Portsmouth Waste Management	363,055	47,454	15,439	14,440	13,014	272,708	9/30/2013
WSSRAP	OR-715	Weldon Spring Waste Treatment	43,977	42,855	11,500	3,750	0	See below [a]	4/30/2001
WSSRAP	OR-775	Weldon Spring Disposal Facility	316,951	87,520	56,000	48,051	53,116	72,264	9/30/2002
WSSRAP	OR-745	Weldon Spring Long-Term S&M	45,900	0	0	0	0	45,900	9/30/2033
ORR	OR-821	Offsite Projects - Def	200,627	16,567	1,826	3,692	14,442	164,100	9/30/2005
ORR	OR-891	Directed Support - Def	698,000	44,513	4,892	6,790	7,384	634,421	9/30/2070
ORR	OR-892	Directed Support - Non-Def	22,122	15,427	1,998	0	0	4,697	9/30/2070
ORR	OR-893	Directed Support - D&D Fund	451,924	51,311	5,835	6,417	3,688	384,673	9/30/2070
OR Ops	OR-NAMP	National Analytical Management Program	TBD	0	0	0	100	TBD	TBD
OR Ops	OR-NCST	Nuclear Criticality Safety Training (DNFSB 97-2)	TBD	0	0	0	2,514	TBD	TBD
OR Ops	OR-PP	Pollution Prevention	TBD	0	0	0	1,061	TBD	TBD
ORR	OR-TM	Transportation and Packaging Management	TBD	0	0	0	1,660	TBD	TBD

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(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
OR Ops	HQNP-SI01-LT-OR	Security Investigations	97,102	0	968	563	613	94,958	9/30/2070
Subtotal, Oak Ridge				1,169,212	515,250	537,808	620,050		
Ohio									
Ashtabula	OH-AB-01	Remediation	108,336	19,909	10,334	10,815	11,485	55,793	9/30/2016
Ashtabula	OH-AB-02	Project Management, Site Services, ES&H	40,696	10,803	5,071	4,531	4,763	15,528	9/30/2005
Columbus	OH-CL-01	King Avenue Site Decontamination	18,092	17,650	1,219	100	0	See below [a]	9/30/2000
Columbus	OH-CL-02	West Jefferson Site Decontamination (Non-Def)	11,341	457	5,750	5,968	0	See below [a]	9/30/2005
Columbus	OH-CL-02-D	West Jefferson Site Decontamination (Defense)	79,871	2,773	1,947	5,940	12,934	56,277	9/30/2005
Columbus	OH-CL-03	Project Management, Site Support & Maintenance (Non-Def)	6,651	2,677	1,563	1,197	0	1,214	9/30/2005
Columbus	OH-CL-03-D	Project Management, Site Support & Maintenance (Defense)	23,603	3,810	1,593	2,868	3,200	12,132	9/30/2005
Fernald	OH-FN-01	Facility Shutdown	293,670	88,092	33,866	28,451	30,979	112,282	9/30/2008
Fernald	OH-FN-02	Facility D&D	195,802	18,398	14,280	11,834	20,263	131,027	5/30/2005
Fernald	OH-FN-03	On-Site Disposal Facility	234,340	35,876	15,827	16,468	14,861	151,308	9/30/2008
Fernald	OH-FN-04	Aquifer Restoration	274,523	53,494	23,123	27,223	23,058	147,625	9/30/2008
Fernald	OH-FN-05	Waste Pits Remediation Project	357,393	57,364	58,885	39,638	49,849	151,657	5/31/2005
Fernald	OH-FN-06	Soils	217,520	25,526	17,910	15,226	7,790	151,068	9/30/2008
Fernald	OH-FN-07	Silos	430,980	40,415	20,411	34,856	27,268	308,030	9/30/2008
Fernald	OH-FN-08	Nuclear Materials	81,592	3,800	3,712	10,015	12,796	51,269	9/30/2005
Fernald	OH-FN-09	Thorium Overpack	2,447 [b]	1,582	0	0	0	n/a	7/1/1997
Fernald	OH-FN-10	Mixed Waste	37,052	15,489	4,563	3,541	7,986	5,473	9/30/2006
Fernald	OH-FN-11	Waste Management	138,386	37,050	17,069	14,274	24,185	45,808	9/30/2008
Fernald	OH-FN-12	Program Support & Oversight	729,471	140,289	69,356	72,996	71,758	375,072	9/30/2008

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[b] Includes uncosted carryover from prior year appropriations that will be costed during or after FY 1997 and is therefore included in the EM baseline cost but is not reflected in the budget authority amounts shown here.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Fernald	OH-FN-13	Post Source Term Removal Projects	865,686	0	0	0	0	865,686	9/30/2070
Miamisburg	OH-MB-01	Tritium Operations Transition	32,815 [b]	32,535	252	0	0	n/a	9/30/1998
Miamisburg	OH-MB-02	Main Hill Tritium	193,096	12,254	22,810	30,295	33,768	93,969	7/15/2004
Miamisburg	OH-MB-02-N	Main Hill Tritium (Non-Def)	7,137	1,990	1,003	996	0	3,148	9/28/2001
Miamisburg	OH-MB-03	Waste Activities	83,304	13,763	14,662	16,144	15,790	22,945	6/1/2004
Miamisburg	OH-MB-04	Main Hill Rad	26,020	4,049	3,187	1,475	1,290	16,019	4/8/2004
Miamisburg	OH-MB-05	Main Hill Non-Rad	18,795	4,478	3,006	3,515	2,786	5,010	5/26/2004
Miamisburg	OH-MB-06	SM/PP Hill	37,025	9,023	1,248	5,463	4,455	16,836	1/15/2004
Miamisburg	OH-MB-07	Test Fire Valley	59,283	5,729	3,764	5,720	9,413	34,657	3/24/2004
Miamisburg	OH-MB-08	Soils	73,094	27,460	5,317	5,776	4,458	30,083	9/30/2004
Miamisburg	OH-MB-09	Facility Operations and Maintenance	133,163	27,825	25,158	23,924	18,165	38,091	9/29/2004
Miamisburg	OH-MB-10	Regulatory Oversight & Site Support	64,323	36,428	3,452	4,690	4,228	15,525	9/30/2070
WVDP	OH-WV-01	HLW Vitrification and Tank Heel High Activity Waste Processing	271,571	107,000	43,800	37,779	0	82,992	9/30/2002
WVDP	OH-WV-01LT	HLW Vitrification and Tank Heel High Activity Waste Processing (Post 2006)	TBD	0	0	0	54,000	TBD	TBD
WVDP	OH-WV-02	Site Transition, Decommissioning, & Project Completion	1,392,223	37,667	30,677	28,100	0	1,295,779	9/30/2015
WVDP	OH-WV-02LT	Site Transition, Decommissioning, & Project Completion (Post 2006)	TBD	0	0	0	46,153	TBD	TBD
WVDP	OH-WV-03	Spent Nuclear Fuel	21,429	2,329	2,747	7,700	0	8,653	9/30/2005
WVDP	OH-WV-03LT	Spent Nuclear Fuel (Post 2006)	TBD	0	0	0	7,200	TBD	TBD
WVDP	OH-WV-04	Project Management/Site Support	637,158	85,111	30,000	33,363	0	488,684	9/30/2015
OH Ops	HQNP-SI01-CL-OH	Security Investigations (Ohio)	576	0	237	94	94	151	9/29/2004
Subtotal, Ohio				983,095	497,799	510,975	524,975		
Richland									
Hanford	RL-ER01	100 Area Remedial Action	696,166	28,169	23,501	27,364	27,694	589,438	9/30/2011
Hanford	RL-ER02	200 Area Remedial Action	2,609,894	2,950	2,092	3,534	0	2,601,318	9/30/2018
Hanford	RL-ER03	300 Area Remedial Action	208,744	13,338	7,812	3,157	10,182	174,255	9/30/2013
Hanford	RL-ER04	Environmental Restoration Disposal Facility	761,860	36,224	29,966	16,146	17,917	661,607	9/30/2044
Hanford	RL-ER05	Facility Surveillance & Maintenance	710,222	20,517	13,881	11,970	11,867	651,987	9/30/2043
Hanford	RL-ER06	Decontamination and Decommissioning	3,637,523	30,150	13,810	18,445	9,198	3,565,920	9/30/2043

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Hanford	RL-ER07	Post Closure Surveillance & Maintenance	140,645	188	59	47	48	140,303	9/30/2043
Hanford	RL-ER08	Groundwater Management	880,079	35,373	18,285	19,394	20,749	786,278	9/30/2044
Hanford	RL-ER09	N Reactor Deactivation	27,934	29,287	0	0	0	See below [a]	TBD
Hanford	RL-ER10	Program Management and Support	2,946,696	75,592	30,833	29,303	30,727	2,780,241	9/30/2044
Hanford	RL-HM01	HAMMER	453,388	18,033	5,800	5,900	5,965	417,690	9/30/2046
RL Ops	RL-NAMP	National Analytical Management Program	TBD	0	0	0	350	TBD	TBD
Hanford	RL-OT01	MISSION SUPPORT	1,954,372	51,127	26,459	25,659	27,983	1,823,144	9/30/2046
RL Ops	RL-OT04	RL Directed Support	1,191,598	49,157	23,774	17,962	16,670	1,084,035	9/30/2046
RL Ops	RL-PP	Pollution Prevention	TBD	0	0	0	850	TBD	TBD
RL Ops	RL-RG01	TWRS Regulatory Unit	53,104	4,090	4,289	5,663	6,526	32,536	7/16/2018
RL Ops	RL-ST01	PNNL WASTE MANAGEMENT	635,043	26,863	14,620	13,681	14,874	565,005	9/30/2030
RL Ops	RL-TM	Transportation and Packaging Management	TBD	0	0	0	2,521	TBD	TBD
Hanford	RL-TP01	B-Plant Sub-Project	53,709	44,567	2,716	0	0	6,426	9/30/1999
Hanford	RL-TP02	WESF Sub-Project	289,194	25,873	10,900	13,206	12,476	226,739	9/30/2019
Hanford	RL-TP03	PUREX Sub-Project	2,838	16,021	0	0	0	See below [b]	7/28/1998
Hanford	RL-TP04	300 Area/SNM Sub-Project	25,232	5,268	4,444	2,687	2,550	See below [a]	9/28/2001
Hanford	RL-TP05	PFP Deactivation	2,970,223	127,054	105,976	120,750	109,836	2,506,607	9/30/2028
Hanford	RL-TP08	324/327 Facility Transition Project	361,733	27,788	31,547	32,872	22,624	246,902	9/7/2007
Hanford	RL-TP08-N	324/327 Facility Transition Project (Non-Def)	TBD	21,912	0	0	0	TBD	TBD
Hanford	RL-TP10	Accelerated Deactivation	606,901	2,114	1,738	2,076	2,229	598,744	9/30/2037
Hanford	RL-TP11	Advanced Reactors Transition	111,490	16,793	1,859	1,394	1,500	89,944	1/05/2004
Hanford	RL-TP12	Transition Project Management	720,918	19,445	12,034	18,960	20,286	650,193	9/30/2037
Hanford	RL-TP13	Landlord Project	675,330	25,417	12,697	13,225	19,000	604,991	9/30/2046
Hanford	RL-TP14	Hanford Surplus Facility Program 300 Area Revitalization Project	573,457	735	628	664	605	570,825	9/30/2033
Hanford	RL-VZ01	Site-Wide Groundwater/Vadose Zone Integration Project	304,306	0	5,761	11,325	13,657	273,563	9/30/2044

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[b] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Hanford	RL-WM01	Spent Nuclear Fuels Project	1,554,620	322,922	170,378	190,409	191,337	679,574	9/30/2007
Hanford	RL-WM02	Canister Storage Building Operations	1,061,153	0	0	0	0	1,061,153	9/30/2046
Hanford	RL-WM03	Solid Waste Storage and Disposal	2,293,830	58,182	28,611	32,503	35,359	2,139,175	9/30/2046
Hanford	RL-WM04	Solid Waste Treatment	2,564,097	71,125	32,511	26,440	32,708	2,401,313	9/30/2035
Hanford	RL-WM05	Liquid Effluents Project	1,338,594	66,067	26,485	28,860	29,950	1,187,232	9/30/2031
Hanford	RL-WM06	Analytical Services	1,687,440	58,240	26,952	25,363	27,242	1,549,643	9/30/2046
Hanford	HQNP-SI01-LT-RL	Security Investigations	50,906	0	1,166	800	800	48,140	9/30/2046
Subtotal, Richland				1,330,581	691,584	719,759	726,280		
Office of River Protection									
ORP	RL-TW01	Tank Waste Characterization	737,986	98,512	34,016	29,556	30,036	545,866	9/30/2025
ORP	RL-TW02	Tank Safety Issue Resolution Project	211,720	62,706	32,627	24,088	18,629	73,670	9/30/2008
ORP	RL-TW03	Tank Farms Operations	3,564,035	259,108	133,141	146,737	188,156	2,836,893	9/30/2025
ORP	RL-TW04	Retrieval Project	6,108,827	78,660	60,071	52,641	73,979	5,843,476	9/30/2046
ORP	RL-TW05	Process Waste Support	511,594	23,430	7,223	12,032	10,138	458,771	9/30/2028
ORP	RL-TW08	Process Waste Privatization Infrastructure	2,806,291	2,145	11,225	17,088	12,222	2,763,611	9/30/2031
ORP	RL-TW09	Immobilized Tank Waste Storage and Disposal Project	3,807,990	12,678	4,575	8,578	10,544	3,771,615	9/30/2048
ORP	RL-TW10	TWRS Management Support	1,288,526	65,629	27,567	47,737	38,435	1,109,158	9/30/2025
Subtotal, Off. River Protect.				602,868	310,445	338,457	382,139		
Rocky Flats [a]									
RFETS	RF001	Buffer Zone Closure Project	276,506	30,609	13,081	9,863	13,978	208,975	12/29/2006
RFETS	RF002	Waste Management Project	942,976	96,486	59,351	66,433	110,252	610,454	10/02/2006
RFETS	RF003	Remediation Waste & Contingent Storage Project	201	-9	1	0	0	209	9/29/2006
RFETS	RF004	SNM Capital Support Project	19,216	16,041	2,864	134	0	See below [b]	9/30/1999
RFETS	RF005	IAEA Project	n/a	175	0	0	0	0	cancelled

[a] The planned completion dates for Rocky Flats projects reflect the current FY 2006 closure baseline. Project details, including completion dates, will be updated following review and acceptance of a revised baseline, which will be submitted later in FY 2000.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
RFETS	RF006	SNM Consolidation Project	8,276	9,158	1,319	719	36	See below [b]	9/28/2005
RFETS	RF007	New Pu Interim Storage Vault	n/a	1,644	0	0	0	0	cancelled
RFETS	RF008	Pu Metals and Oxides Stabilization	71,472	13,038	18,127	17,557	11,640	11,110	5/2/2003
RFETS	RF009	Pu Solid Residue Stabilization Project	343,669	94,967	70,836	93,005	42,000	42,861	9/30/2003
RFETS	RF010	Pu Liquid Stabilization	28,685	22,943	4,441	90	0	See below [b]	9/30/1999
RFETS	RF011	Uranium Disposition Project	13,666 [b]	11,745	788	0	0	0	8/31/1999
RFETS	RF012	SNM Shipping Project	49,956	4,945	6,692	9,483	16,510	12,326	9/30/2003
RFETS	RF013	Closure Caps Project	42,040	0	30	84	412	41,514	11/03/2006
RFETS	RF014	Industrial Zone Closure Project	451,307	47,237	16,614	14,817	19,668	352,971	12/27/2006
RFETS	RF015	Miscellaneous Production Zone Cluster Closure Project	147,956	23,518	11,648	7,292	9,996	95,502	6/7/2006
RFETS	RF016	Building 371 Cluster Closure Project	355,310	36,874	20,918	33,903	32,478	231,137	5/22/2006
RFETS	RF017	Building 707/750 Cluster Closure Project	331,898	35,146	20,826	24,366	25,667	225,893	1/24/2006
RFETS	RF018	Building 771/774 Cluster Closure Project	255,088	40,280	39,308	34,249	28,209	113,042	8/18/2005
RFETS	RF019	Building 776/777 Cluster Closure Project	269,885	24,730	14,719	27,159	18,561	184,716	8/11/2005
RFETS	RF020	Building 881 Cluster Closure Project	199,853	10,380	4,776	4,933	5,397	174,367	5/2/2006
RFETS	RF021	Building 991 Cluster Closure Project	48,419	2,167	1,599	1,471	1,502	41,680	11/17/2005
RFETS	RF022	Building 779 Cluster Closure Project	77,199	25,870	36,935	5,321	0	9,073	3/22/2004
RFETS	RF023	Utilities and Infrastructure Project	394,927	90,037	41,838	40,792	45,880	176,380	9/29/2006
RFETS	RF024	Safeguards and Security Project	267,461	45,656	34,872	34,946	39,491	112,496	9/29/2006
RFETS	RF025	Infrastructure Improvement/Replacement Project	67,138	19,907	14,429	3,853	0	28,949	6/13/2000
RFETS	RF027	Analytical Services Project	80,413	22,784	7,597	7,110	10,541	32,381	9/29/2006
RFETS	RF029	Rocky Flats Field Office - DOE Mgmt	3,284,583	55,685	17,753	16,985	18,800	3,175,360	TBD
RFETS	RF030	K-H Project Management	1,111,697	241,744	104,031	127,623	126,740	511,559	12/27/2006
RFETS	RF034	Management Project	659,226	95,728	90,155	81,209	85,665	306,469	12/28/2006
RF Ops	HQNP-SI01-CL	Security Investigations (Closure)	6,407	0	1,652	1,278	1,252	2,225	9/30/2005

[a] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

[b] Includes uncosted carryover from prior year appropriations that will be costed during or after FY 1997 and is therefore included in the EM baseline cost but is not reflected in the budget authority amounts shown here.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Subtotal, Rocky Flats				1,119,485	657,200	664,675	664,675		
Savannah River									
SRS	SR-DO01	DOE Projects Line Item	8,289	0	0	0	0	8,289	9/30/1999
SRS	SR-DO02	WSI Landlord Project	2,679,827	100,088	54,694	59,133	60,086	2,405,826	9/30/2028
SR Ops	SR-DO03	Savannah River Natural Resource Management and Research Institute	337,101	17,011	6,699	7,038	6,338	300,015	9/30/2028
SR Ops	SR-DO04	Ecology Lab Project	374,533	17,886	7,896	8,084	7,500	333,167	9/30/2028
SR Ops	SR-DO05	DOE External Program Support	258,405	9,243	5,173	6,150	5,530	232,309	9/30/2028
SR Ops	SR-DO07	DOE Program Support	555,452	13,840	10,606	12,320	4,150	514,536	9/30/2028
SRS	SR-ER01	Flood Plain Swamp Project	159,675	28,338	9,060	4,414	7,187	110,676	9/30/2038
SRS	SR-ER02	Four Mile Branch Project	632,649	45,617	34,422	38,004	46,696	467,910	9/30/2038
SRS	SR-ER03	Lower Three Runs & Operations Project	1,046,326	9,580	19,365	28,674	29,843	958,864	9/30/2038
SRS	SR-ER04	Pen Branch Project	187,360	13,110	5,417	8,958	10,369	149,506	9/30/2038
SRS	SR-ER05	Steel Creek Project	132,768	3,271	4,984	4,913	4,303	115,297	9/30/2038
SRS	SR-ER06	Upper Three Runs Project	613,282	45,230	19,407	24,046	19,039	505,560	9/30/2038
SRS	SR-ER07	Program Management	244,173	54,265	9,048	9,811	9,816	161,233	9/30/2040
SRS	SR-ER08	Facility Disposition Program Planning	-1	0	0	0	0	0	9/1/2028
SRS	SR-ER09	HWCTR Projects	8,746 [a]	8,454	0	0	0	0	9/30/1998
SRS	SR-FA01	247-F Deactivation Project	1	0	0	0	0	0	10/01/1996
SRS	SR-FA02	F Canyon Deactivation Project	101,800	0	0	455	2,495	98,850	9/30/2011
SRS	SR-FA03	FB Line Deactivation Project	63,700	0	0	0	0	63,700	9/30/2011
SRS	SR-FA04	H Canyon Deactivation Project	87,300	0	0	0	0	87,300	9/1/2009
SRS	SR-FA05	HB Line Deactivation Project	39,700	0	0	0	0	39,700	9/1/2009
SRS	SR-FA06	235-F Deactivation Project	89,500	0	0	0	0	89,500	9/1/2011
SRS	SR-FA07	Old HB Line Deactivation Project	31,800	0	0	0	0	31,800	9/30/2009
SRS	SR-FA08	P Reactor Deactivation Project	16,125	673	0	0	0	15,452	6/1/2012
SRS	SR-FA09	C Reactor Deactivation Project	16,004	2,468	0	0	0	13,536	6/1/2012
SRS	SR-FA10	R Reactor Deactivation Project	18,346	5,832	0	0	0	12,514	6/1/2012

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			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
SRS	SR-FA11	K Reactor Deactivation Project	19,405	0	0	0	0	19,405	6/1/2021
SRS	SR-FA12	L Reactor Deactivation Project	34,768	0	0	0	0	34,768	6/1/2046
SRS	SR-FA13	RBOF Deactivation Project	11,550	0	0	0	0	11,550	6/1/2011
SRS	SR-FA14	D Area Deactivation Project	10,000	0	0	0	0	10,000	9/1/2053
SRS	SR-FA15	M Area Deactivation Project	14,144	5,720	0	0	0	8,424	9/1/2011
SRS	SR-FA16	F-Area Monitoring	5,108,072	4,114	475	76	273	5,103,134	9/1/2070
SRS	SR-FA17	H-Area Monitoring & Minor Facility Monitoring	3,150,300	0	2,240	0	0	3,148,060	9/1/2070
SRS	SR-FA18	M Area Monitoring Project	466,001	30,092	11,063	7,977	8,297	408,572	9/1/2070
SRS	SR-FA19	D Area Monitoring Project	260,834	0	0	1,204	966	258,664	9/1/2070
SRS	SR-FA20	Reactors Monitoring Project	2,135,087	11,068	10,099	12,515	6,492	2,094,913	9/1/2070
SRS	SR-FA22	RBOF Monitoring Project	234,030	0	0	0	0	234,030	9/1/2070
SRS	SR-FA23	Landlord Facilities Disposition	574,584	0	0	3,895	2,731	567,958	9/30/2070
SRS	SR-FA24	High-Level Waste Facilities Disposition	1,505,851	0	0	0	0	1,505,851	9/30/2070
SRS	SR-FA25	Solid Waste Facilities Disposition	50,000	0	0	0	0	50,000	9/30/2045
SRS	SR-FA26	Long-Term Stewardship	73,607	0	0	0	0	73,607	9/30/2070
SRS	SR-HL01	H-Tank Farm	2,794,242	177,777	93,063	93,201	88,393	2,341,808	9/30/2027
SRS	SR-HL02	F-Tank Farm	1,701,204	98,581	56,854	61,291	60,100	1,424,378	9/30/2027
SRS	SR-HL03	Waste Removal Ops & Tank Closure	1,166,768	28,468	3,170	4,968	4,884	1,125,278	9/30/2028
SRS	SR-HL04	Waste Pretreatment	2,164,149	151,198	47,547	52,717	52,000	1,860,687	9/1/2026
SRS	SR-HL05	Vitrification	5,686,219	260,022	127,291	121,601	130,140	5,047,165	9/30/2026
SRS	SR-HL06	Glass Waste Storage	229,748	324	489	650	320	227,965	3/30/2026
SRS	SR-HL07	Effluent Treatment Facility	1,118,586	40,841	17,508	16,069	16,665	1,027,503	10/1/2028
SRS	SR-HL08	Saltstone	1,163,706	18,899	1,563	820	908	1,141,516	9/30/2026
SRS	SR-HL09	Tank Farm Services Upgrades	8,855	10,808	1,001	0	0	See below [a]	9/30/1999
SRS	SR-HL10	H-Tank Farm Storm Water System Upgrades	6,478	1,110	3,479	3,903	217	See below [a]	1/31/2001
SRS	SR-HL11	Tank Farm Support Services F Area	21,693	0	3,064	4,078	8,996	5,555	6/30/2002
SRS	SR-HL12	HLW Removal	1,476,982	23,923	22,467	23,861	39,904	1,366,827	9/1/2028
SRS	SR-HL13	Salt Disposition	2,908,936	0	20,097	14,049	21,498	2,853,292	9/30/2026
SRS	SR-IN01	Plantwide Fire Protection Line Item	28,947	1,257	1,225	544	0	25,921	9/30/2000

[a] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

			(dollars in thousands)						
			Costs	Budget Authority					
Ops Office/ Installation	Project Number	Project Name	EM Baseline (current $) 1997-2070	Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
SRS	SR-IN02	Operations Support Facility Line Item	0	4,760	0	0	0	See below [a]	10/1/1996
SRS	SR-IN03	Plant Maintenance Line Item	1,825 [a]	154	0	0	0	1,671	9/30/1998
SRS	SR-IN04	Domestic Water Line Item	6,759 [b]	2,387	290	0	0	0	12/31/1998
SRS	SR-IN05	CFC HVAC Chiller Retrofit	52,864	20,558	10,395	2,185	13,853	5,873	6/30/2002
SRS	SR-IN06	Radio Trunking System Line Item	14,091 [b]	580	130	0	0	0	12/31/1998
SRS	SR-IN07	Site Road Infrastructure Line Item	151	7,000	0	0	0	See below [a]	9/30/1998
SRS	SR-IN08	High-Level Drain Lines Line Item	2,634 [b]	476	0	0	0	0	9/30/1998
SRS	SR-IN09	Health Physics Support Line Item	1,204	2,957	0	0	0	See below [a]	9/30/1998
SRS	SR-IN10	Regulatory Monitoring and Bioassay Lab	33,400	8,997	7,435	13,073	4,445	See below [a]	9/30/2001
SRS	SR-IN11	Infrastructure Line Item	297,862	0	1,487	1,333	0	295,042	9/30/2030
SRS	SR-IN12	Operating Projects	1,083,600	15,330	22,638	24,669	19,377	1,001,586	9/30/2030
SRS	SR-IN13	Decontamination of Lab Facilities, 772-F & 773-A	15,358	0	2,001	4,245	2,102	7,010	2/28/2002
SRS	SR-IN14	Restoration of Technical Area Ventilation Systems	38,032	0	0	0	0	38,032	9/30/2006
SRS	SR-IN15	Infrastructure Restoration and Preservation	199,470	0	0	0	0	199,470	9/30/2006
SRS	SR-NM01	F-Area Stabilization Project	2,426,190	345,487	188,554	204,386	207,670	1,480,093	9/30/2009
SRS	SR-NM02	H-Area Stabilization Project	1,635,476	273,078	143,255	150,127	159,254	909,762	9/30/2006
SRS	SR-NM03	Nuclear Material Storage Line Item	455,739	32,666	41,213	8,554	7,644	365,662	6/30/2006
SRS	SR-NM04	Canyon Exhaust Line Item	66,403	2,321	32,777	0	10,758	See below [a]	9/30/2001
SRS	SR-NM05	Independent Waste Handling Line Item	674,380	0	0	0	0	674,380	9/30/2070
SRS	SR-NM06	Nuclear Material Storage Operations	625,175	0	0	0	0	625,175	9/30/2020
SRS	SR-NM07	Depleted Uranium Storage	158,100	0	0	0	0	158,100	9/30/2070
SRS	SR-NM08	HEU Blend Down Project	TBD	0	0	0	37,932	TBD	TBD
SRS	SR-SF01	K Area Spent Nuclear Fuel Project	89,899	61,073	28,826	0	0	0	9/30/1999
SRS	SR-SF01-LT	K Area Spent Nuclear Fuel Project (Post 2006)	604,767	0	0	33,654	33,257	537,856	9/30/2013
SRS	SR-SF02	L Area Spent Nuclear Fuel Project	2,432,009	41,629	29,581	38,165	38,822	2,283,812	9/30/2037
SRS	SR-SF03	RBOF Spent Nuclear Fuel Project	175,809	34,528	16,153	11,773	13,087	100,268	9/30/2007

[a] Includes uncosted carryover from prior year appropriations that will be costed during or after FY 1997 and is therefore included in the EM baseline cost but is not reflected in the budget authority amounts shown here.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
SRS	SR-SF04	Heavy Water - D Area	41,972	30,832	8,353	0	0	See below [b]	9/30/1999
SRS	SR-SF04-LT	Heavy Water - D Area (Post 2006)	62,396	0	0	317	0	See below [a]	TBD
SRS	SR-SF06	Alternate Technology Project	39,583	14,761	7,581	4,000	0	13,241	9/30/2005
SRS	SR-SF06LT	Alternate Technology Project (Post 2006)	TBD	0	0	0	7,484	TBD	TBD
SRS	SR-SF07	Disassembly Basin Upgrade Line Item	20,853	10,132	0	0	0	10,721	9/30/2005
SRS	SR-SF09	Spent Nuclear Fuel Treatment and Storage	985,345	3,682	1,568	7,000	0	973,095	9/30/2037
SRS	SR-SW01	Consolidated Incinerator Facility	1,406,156	56,097	24,461	18,722	18,332	1,288,544	9/30/2030
SRS	SR-SW02	Transuranic Waste Project	1,834,980	18,953	12,048	12,910	11,492	1,779,577	9/30/2030
SRS	SR-SW03	Mixed Low-Level Waste Project	261,565	10,380	3,730	4,683	4,856	237,916	9/30/2032
SRS	SR-SW04	Low-Level Waste Project	805,695	16,597	16,791	14,334	10,463	747,510	3/31/2029
SRS	SR-SW05	Hazardous Waste Project	247,543	11,945	5,473	5,068	4,413	220,644	9/30/2035
SRS	SR-SW06	Sanitary Waste Project	64,586	4,944	2,241	1,195	1,021	55,185	9/1/2032
SRS	SR-SW07	Pollution Prevention	121,089	4,679	1,151	1,385	2,160	111,714	9/30/2035
SR Ops	HQNP-SI01-LT-SR	Security Investigations	165,556	0	1,954	1,947	2,326	159,329	9/30/2028
Subtotal, Savannah River				2,276,091	1,219,552	1,199,144	1,266,884		
Multi-Site									
HQ	HQ-6002	Support to Transition Activities	261,437	13,285	2,707	3,540	6,117	235,788	9/30/2040
HQ	HQ-EM74	Headquarters Program Integration	300,525	19,630	8,117	9,069	9,000	254,709	9/30/2070
HQ	HQ-100-AA	Technical Support to ER	232,096	12,176	976	676	2,690	215,578	9/30/2070
HQ	HQ-2-00	Technical Support to ER (Non-Def)	535,232	14,514	5,382	5,824	0	509,512	9/30/2070
HQ	HQ-WM001	Complex-Wide Waste Management Support and Analyses	146,735	18,997	3,132	2,554	2,500	119,552	9/30/2070
HQ	HQ-PM-001	Policy & Management	1,056,251	42,893	26,437	38,238	17,190	931,493	9/30/2070
HQ	HQ-PM-PC	Policy & Management (Site/Project Completion)	TBD	0	1,188	457	0	TBD	TBD
HQ	HQ-PM-PCND	Policy & Management (Site/Project Completion) (Non-Def)	TBD	0	0	317	0	TBD	TBD
HQ	HQNP-NCST	Nuclear Criticality Safety Training	69,416	0	3,000	3,750	241	62,425	9/30/2020

[a] EM is refining the life-cycle cost estimate for this project based upon the current and historic levels of appropriations and the resulting unappropriated balance.

(dollars in thousands)

Ops Office/ Installation	Project Number	Project Name	Costs: EM Baseline (current $) 1997-2070	Budget Authority: Prior Year (FY97-98)	FY 1999 Current Approp	FY 2000 Current Approp	FY 2001 Request	Unapprop-riated Balance	Planned Compl. Date
Multi-Site	OPS/HQ-PP	Pollution Prevention	809,816	46,728	12,992	6,986	1,762	741,348	9/30/2070
Multi-Site	OPS/HQ-PP-N	Pollution Prevention (Non-Def)	18,702	2,238	100	99	0	16,265	9/30/2070
Multi-Site	HQ-TMHQ1	Transportation and Packaging Management	1,171,456	23,273	12,183	11,503	0	1,124,497	9/30/2070
Multi-Site	ID-CMP-001	National Analytical Management Program	104,215	11,022	2,971	2,935	700	86,587	9/30/2070
Multi-Site	HQ-EM-HQ-001	Emergency Preparedness Program	286,557	6,743	3,218	2,789	2,800	271,007	9/30/2070
Multi-Site	HQ-EM75	Environmental & Regulatory Analysis	10,925	2,234	518	293	300	7,580	9/30/2070
Multi-Site	HQ-PC-001	Packaging Certification	522,195	4,648	3,756	3,681	3,700	506,410	9/30/2070
Subtotal, Multi-Site				218,381	86,677	92,711	47,000		
n/a	HQ-9999-01	Contribution to the UE D&D Fund	4,714,574	764,648	398,088	420,000	420,000	2,711,838	9/30/2007
HQ	HQ-4000	Reimbursements to Uranium/Thorium Licensees	294,000	74,000	30,000	30,000	30,000	130,000	9/30/2005
Various Loc	multiple	Science and Technology	5,893,276	621,132	236,715	228,131	196,548	4,610,750	9/30/2020
Various Loc	HQ-PD-XX	Program Direction	12,392,873	756,011	337,073	339,409	359,888	10,600,492	6/20/2070
n/a	HQNP-HS01-EH	EH Health Studies	1,432,000 [a]	0	12,000	0	0	1,420,000 [a]	9/30/2070 [a]
n/a	n/a	Program Direction Reprogramming Sources	n/a	n/a	0	19,000	0	n/a	n/a
n/a	n/a	Idaho TMI Reprogramming Sources	n/a	n/a	0	5,200	0	n/a	n/a
n/a	n/a	FFTF Reprogramming Sources	n/a	n/a	0	9,000	0	n/a	n/a
Subtotal, EM				12,243,263	6,033,675	6,121,829	6,316,880		
D&D Fund Deposit (Offset)				-764,648	-398,088	-420,000	-420,000		
Use of Prior Year Balances				-188,308	-39,012	-3,777	-34,317		
Dupont Pension (Offset)				-8,000	0	-8,700	-50,000		
Y2K Supplemental Appropriation				0	13,840	0	0		
Fast Flux Test Facility (transferred to NE in FY 1999)				41,727	0	0	0		
Contractor Travel Savings				0	0	0	-9,700		
Total, Traditional Budget Authority				11,324,034	5,610,415	5,689,352	5,802,863		
Privatization				530,000	228,357	188,282	515,000		
Total, EM				11,854,034	5,838,772	5,877,634	6,317,863		

[a] EM is refining the life-cycle cost and project end date associated with this project to reflect the transfer of funding for this program to the Office of Environment, Safety and Health.

Environmental Management FY 2001 Request
Corporate Performance Measure Quantities by Project Baseline Summary [a] [b]

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Performance Measure Quantities: Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
Albuquerque								
Lovelace	AL005	Lovelace Respiratory Research Institute						
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	2,314	63	-	31	31	2,189
		Low-Level Waste/Treatment (m^3)	4,462	9	-	-	-	4,453
		Low-Level Waste/Storage (m^3)	N/A	-	19	60	60	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	72	-	-	-	1	71
KCP	AL007	Kansas City Environmental Restoration Project						
		Release Sites/Cleanup	5	5	-	-	-	-
LANL	AL009	LANL Environmental Restoration						
		Facilities/Decommissioning - Cleanup	56	7	-	-	-	49
		Release Sites/Cleanup	571	174	9	1	4	383
		Release Sites/Assessment	N/A	196	5	9	2	N/A
		Low-Level Waste/On-Site Disposal (m^3)	33,058	-	-	370	164	32,524
LANL	AL012	LANL Waste Management - Newly Generated Waste						
		Low-Level Waste/On-Site Disposal (m^3)	See below [c]	1,314	-	-	-	TBD
		Low-Level Waste/Treatment (m^3)	96	-	-	-	-	96
LANL	AL013	LANL Waste Management - Legacy Waste						
		Mixed Low-Level Waste/Storage (m^3)	N/A	381	241	188	135	N/A
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	81	-	-	-	-	81
		Mixed Low-Level Waste/Commercial Disposal (m^3)	570	-	140	53	53	324
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	9,142	-	191	42	200	8,709
		Transuranic Waste/Storage (m^3)	N/A	9,142	9,136	9,094	8,894	N/A
Pantex	AL014	Pantex Plant Site Remediation Project						
		Release Sites/Cleanup	46	43	-	1	1	1
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Facilities/Deactivated	1	-	-	-	-	1
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	167	-	-	-	-	167

[a] Life-cycle estimates for release sites, facilities, and high-level waste canisters are from fiscal years 1997 through 2070. Waste type, nuclear materials, and spent nuclear fuel estimates are from fiscal years 1998 through 2070.

[b] Data included in the "Prior to FY 1999" column begins in either FY 1997 or FY 1998 depending on the corporate performance measure addressed.

[c] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
Pantex	AL015	Pantex Waste Operations						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	375	360	-	-	-	15
		Low-Level Waste/Treatment (m^3)	68	51	-	-	-	17
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	18	-	-	-	-	18
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	24	-	-	-	TBD
SNL	AL017	Sandia National Laboratories Waste Management						
		Low-Level Waste/Commercial Disposal (m^3)	14	-	-	-	-	14
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	720	152	-	-	-	568
		Low-Level Waste/Treatment (m^3)	See below [a]	21	-	-	-	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	6	-	-	-	-	6
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	27	1	-	-	-	26
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	50	-	-	-	TBD
SNL	AL018	Sandia ER Project						
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	4	-	-	TBD
		Release Sites/Cleanup	71	34	12	10	6	9
		Release Sites/Assessment	N/A	2	-	-	1	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,706	-	-	-	-	1,706
UMTRA	AL020	UMTRA - Surface Remedial Action Project						
		Release Sites/Cleanup	6	6	-	-	-	-
GJPO	AL021	Maxey Flats Field Management Project						
		Release Sites/Cleanup	1	-	-	-	-	1
GJPO	AL022	Monticello Projects						
		Release Sites/Cleanup	15	7	2	3	3	-
UMTRA	AL023	UMTRA Ground Water						
		Release Sites/Cleanup	23	7	7	1	-	8
		Release Sites/Assessment	N/A	9	7	1	-	N/A
GJPO	AL024	GJO All Other Projects						
		Facilities/Decommissioning - Cleanup	34	7	7	17	2	1
		Facilities/Decommissioning - Assessment	N/A	-	6	5	2	N/A
		Release Sites/Cleanup	3	-	-	-	-	3
		Release Sites/Assessment	N/A	-	1	-	-	N/A
Pinellas	AL025	Pinellas STAR Center Environmental Restoration Project						
		Release Sites/Cleanup	4	-	-	-	-	4

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
LANL	AL026	Off-site Source Recovery Program - Def						
		Mixed Low-Level Waste/TBD Disposal (m^3)	8	-	-	8	-	-
		Low-Level Waste/On-Site Disposal (m^3)	7	-	-	-	-	7
		Low-Level Waste/TBD Disposal (m^3)	10	-	-	-	-	10
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	19	-	-	-	1	18
		Transuranic Waste/Storage (m^3)	N/A	-	-	1	5	N/A
LANL	AL030	Land Parcels Transfer at LANL						
		Facilities/Decommissioning - Cleanup	44	4	-	2	1	37
		Release Sites/Cleanup	73	19	1	1	1	51
		Release Sites/Assessment	N/A	18	1	-	-	N/A
GJPO	AL031	Long-Term Surveillance and Maintenance at Grand Junction						
		Release Sites/Cleanup	2	-	-	-	-	2
LANL	AL032	Off-site Source Recovery Program - Non-Def						
		Low-Level Waste/TBD Disposal (m^3)	15	-	-	-	-	15
		Transuranic Waste/Storage (m^3)	N/A	-	4	15	32	N/A
Carlsbad								
WIPP	CAO-1	WIPP Base Operations						
		Transuranic Waste/Shipments Received at WIPP	See below [a]	-	32	120	485	TBD
		Transuranic Waste/Received for Disposal at WIPP (m^3)	175,600	-	276	1,204	3,450	170,670
Chicago								
Ames	CH-AMESRA	Ames Remedial Actions						
		Release Sites/Cleanup	1	1	-	-	-	-
Ames	CH-AMESWO	AMES Waste Operations						
		Low-Level Waste/Treatment (m^3)	See below [a]	-	2	1	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	15	-	2	5	-	8
		Mixed Low-Level Waste/Commercial Disposal (m^3)	1	-	-	1	-	-
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	1	-	N/A
ANL-E	CH-ANLEDD	ANL-E Decontamination and Decommissioning Actions						
		Facilities/Decommissioning - Cleanup	52	18	1	8	4	21
		Facilities/Decommissioning - Assessment	N/A	24	-	1	9	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,009	-	-	-	-	1,009
ANL-E	CH-ANLERA	ANL-E Remedial Actions						
		Release Sites/Cleanup	52	23	7	9	6	7
		Release Sites/Assessment	N/A	37	2	5	6	N/A

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
ANL-E	CH-ANLEWO	ANL-E Waste Operations						
		Low-Level Waste/Commercial Disposal (m^3)	28	-	-	-	-	28
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	882	283	156	196	-	247
		Low-Level Waste/Storage (m^3)	N/A	113	208	120	-	N/A
		Low-Level Waste/Treatment (m^3)	1,181	301	278	302	-	300
		Mixed Low-Level Waste/Commercial Disposal (m^3)	31	-	2	19	-	10
		Mixed Low-Level Waste/Treatment (m^3)	94	41	10	11	-	32
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	79	-	-	-	-	79
		Mixed Low-Level Waste/Storage (m^3)	N/A	143	176	133	-	N/A
		Transuranic Waste/Storage (m^3)	N/A	90	91	93	-	N/A
		Transuranic Waste/Treatment (m^3)	See below [a]	11	2	85	-	TBD
ANL-E	CH-ANLEWO-D	ANL-E Waste Operations (Defense)						
		Transuranic Waste/Treatment (m^3)	95	-	-	-	-	95
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	95	-	-	-	-	95
		Transuranic Waste/Storage (m^3)	N/A	-	-	-	95	N/A
ANL-W	CH-ANLWRA	ANL-W Remedial Actions						
		Release Sites/Cleanup	8	4	-	-	4	-
		Facilities/Decommissioning - Cleanup	1	1	-	-	-	-
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	144	-	-	-	-	144
BNL	CH-BRNLBYW	BNL Boneyard Waste						
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	961	-	-	-	-	961
BNL	CH-BRNLDD	BNL Decontamination and Decommissioning Actions						
		Facilities/Decommissioning - Cleanup	3	-	-	1	1	1
		Facilities/Decommissioning - Assessment	N/A	-	-	1	1	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	417	-	-	-	-	417
BNL	CH-BRNLRA	BNL Remedial Actions						
		Facilities/Decommissioning - Assessment	N/A	-	1	-	-	N/A
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Release Sites/Cleanup	49	33	2	1	2	11
		Release Sites/Assessment	N/A	23	11	-	-	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,732	-	-	-	-	1,732
BNL	CH-BRNLWO	BNL Waste Operations						
		Mixed Low-Level Waste/Commercial Disposal (m^3)	28	-	4	11	-	13
		Mixed Low-Level Waste/Treatment (m^3)	35	-	1	1	-	33
		Mixed Low-Level Waste/Storage (m^3)	N/A	12	9	6	-	N/A
		Low-Level Waste/Storage (m^3)	N/A	218	43	-	-	N/A

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Low-Level Waste/Commercial Disposal (m^3)	532	-	220	12	-	300
		Low-Level Waste/Treatment (m^3)	1,306	233	172	110	-	791
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,020	57	28	87	-	848
CH Ops	CH-CHOOSA	Site A Cleanup						
		Release Sites/Cleanup	2	2	-	-	-	-
PPPL	CH-PPPLRA	PPPL Remedial Actions						
		Release Sites/Cleanup	8	8	-	-	-	-
PPPL	CH-PPPLWO	PPPL Waste Operations						
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	1	-	TBD
		Mixed Low-Level Waste/Treatment (m^3)	8	-	-	2	-	6
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	303	85	34	103	-	81
		Low-Level Waste/Treatment (m^3)	770	85	87	101	-	497
Idaho								
INEEL	ID-ER-101	Test Area North Remediation						
		Release Sites/Cleanup	25	-	13	-	-	12
		Release Sites/Assessment	N/A	-	21	-	-	N/A
INEEL	ID-ER-102	Test Reactor Area Remediation						
		Release Sites/Cleanup	21	7	-	6	6	2
		Release Sites/Assessment	N/A	15	-	6	-	N/A
INEEL	ID-ER-103	Idaho Chemical Processing Plant Remediation						
		Release Sites/Cleanup	58	-	9	-	-	49
		Release Sites/Assessment	N/A	-	40	-	-	N/A
INEEL	ID-ER-104	Central Facilities Area (CFA) Remediation						
		Release Sites/Cleanup	23	7	-	11	-	5
		Release Sites/Assessment	N/A	4	-	16	-	N/A
INEEL	ID-ER-105	Power Burst Facility/Auxiliary Reactor Area						
		Release Sites/Cleanup	21	1	-	10	-	10
		Release Sites/Assessment	N/A	-	-	20	-	N/A
INEEL	ID-ER-106	Radioactive Waste Management Complex Remediation						
		Release Sites/Cleanup	10	-	-	-	-	10
INEEL	ID-ER-108	Sitewide Monitoring Area Remediation						
		Release Sites/Cleanup	15	1	-	-	-	14
INEEL	ID-ER-110	Decontamination and Decommissioning						
		Facilities/Decommissioning - Cleanup	210	11	8	4	2	185
		Facilities/Decommissioning - Assessment	N/A	3	5	3	3	N/A
INEEL	ID-HLW-101	High-Level Waste Pretreatment						
		Mixed Low-Level Waste/Treatment (m^3)	1,065	-	-	-	-	1,065
		High-Level Waste/Treatment (m^3)	12,845	760	385	304	1,815	9,581

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		High-Level Waste/Storage (m^3)	N/A	9,367	9,359	9,411	8,018	N/A
INEEL	ID-HLW-103	HLW Treatment and Storage						
		High-Level Waste/Canisters Produced	834	-	-	-	-	834
		High-Level Waste/Treatment (m^3)	131,124	-	-	-	-	131,124
		Mixed Low-Level Waste/Treatment (m^3)	866	-	-	-	-	866
		Low-Level Waste/On-Site Disposal (m^3)	32,507	-	-	-	-	32,507
INEEL	ID-OIM-110	Pre-FY 2007 Surplus Facility Deactivation Project						
		Facilities/Deactivated	25	1	1	-	-	23
INEEL	ID-OIM-110-N	Pre-FY 2007 Surplus Facility Deactivation Project - Non Defense						
		Facilities/Deactivated	2	-	-	-	-	2
INEEL	ID-OIM-111	Post-FY2006 Surplus Facility Deactivation Projects						
		Facilities/Deactivated	50	-	-	-	-	50
INEEL	ID-SNF-103	Emptied SNF Facilities						
		Spent Nuclear Fuel/Prepared and Shipped for Consolidation (MTHM)	4.000	-	0.100	0.100	-	4.000
		Spent Nuclear Fuel/Moved to Dry Storage (MTHM)	93.000	0.100	0.340	35.070	46.780	11.000
INEEL	ID-WM-101	INEEL LLW/MLLW/Other Waste Program						
		Mixed Low-Level Waste/Storage (m^3)	N/A	1,714	2,219	4,267	4,200	N/A
		Mixed Low-Level Waste/TBD Disposal (m^3)	4	-	-	-	-	4
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	166	21	-	-	-	145
		Mixed Low-Level Waste/Commercial Disposal (m^3)	1,487	-	75	52	52	1,308
		Mixed Low-Level Waste/Treatment (m^3)	5,266	226	222	200	200	4,418
		Low-Level Waste/On-Site Disposal (m^3)	25,365	3,264	4,671	4,000	2,500	10,930
		Low-Level Waste/Treatment (m^3)	24,088	3,690	3,099	2,500	2,200	12,599
		Low-Level Waste/Storage (m^3)	N/A	6,035	3,027	1,000	1,000	N/A
INEEL	ID-WM-103	INEEL Transuranic Waste						
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	3,185	-	26	96	1,160	1,903
		Transuranic Waste/Storage (m^3)	N/A	65,000	64,974	64,878	63,718	N/A
INEEL	ID-WM-105	AMWTP Production Operations						
		Mixed Low-Level Waste/Treatment (m^3)	623	-	-	-	-	623
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	28,743	-	-	-	-	28,743
		Transuranic Waste/Treatment (m^3)	61,604	-	-	-	-	61,604
INEEL	ID-WM-107	Long-Term Treatment/Storage/Disposal Operations						
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	20	-	-	-	-	20
		Low-Level Waste/On-Site Disposal (m^3)	212	-	-	-	-	212

Ops Office/ Installation	Project Number	Project Name / Measure	Performance Measure Quantities: Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
		Low-Level Waste/TBD Disposal (m^3)	28,982	-	-	-	-	28,982
		Low-Level Waste/Treatment (m^3)	70,908	-	-	-	-	70,908
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	525	-	-	-	-	525
		Mixed Low-Level Waste/Commercial Disposal (m^3)	1,065	-	-	-	-	1,065
		Mixed Low-Level Waste/Treatment (m^3)	2,471	-	-	-	-	2,471
Nevada								
NTS	NV211	Soils						
		Release Sites/Cleanup	15	-	-	-	2	13
		Low-Level Waste/On-Site Disposal (m^3)	111,266	-	-	-	-	111,266
NTS	NV212	Underground Test Area (UGTA)						
		Release Sites/Cleanup	879	-	-	-	-	879
NTS	NV214	Industrial Sites						
		Facilities/Decommissioning - Cleanup	6	1	-	-	-	5
		Low-Level Waste/On-Site Disposal (m^3)	8,683	-	-	-	-	8,683
		Release Sites/Cleanup	567	36	28	42	16	445
		Release Sites/Assessment	N/A	35	7	17	7	N/A
NV Ops	NV240	Off-sites						
		Release Sites/Cleanup	73	4	-	-	34	35
		Release Sites/Assessment	N/A	1	34	-	-	N/A
NTS	NV350	TRU/Mixed TRU						
		Transuranic Waste/Treatment (m^3)	See below [a]	78	78	180	-	TBD
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	670	-	-	-	-	670
		Transuranic Waste/Storage (m^3)	N/A	671	671	671	671	N/A
NTS	NV360	Mixed Low-Level Waste						
		Mixed Low-Level Waste/On-Site Disposal (m^3)	See below [a]	264	-	-	1	TBD
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	13	13	-	-	TBD
		Mixed Low-Level Waste/Storage (m^3)	N/A	13	13	1	-	N/A
NTS	NV370	Low-Level Waste						
		Mixed Low-Level Waste/On-Site Disposal (m^3)	See below [a]	-	2	-	-	TBD
		Low-Level Waste/On-Site Disposal (m^3)	237,666	11,059	17,125	14,491	11,072	183,919
Oakland								
LLNL	OK-001	LLNL Main Site Remediation						
		Release Sites/Cleanup	10	7	1	2	-	-
		Release Sites/Assessment	N/A	1	1	2	-	N/A
LLNL	OK-001LT	LLNL Main Site Remediation (Post 2006)						
		Release Sites/Cleanup	34	-	-	-	17	17

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Performance Measure Quantities: Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
		Release Sites/Assessment	N/A	-	-	-	17	N/A
LLNL	OK-002	Lawrence Livermore National Laboratory Site 300 Remedial Action						
		Release Sites/Cleanup	21	12	4	5	-	-
		Release Sites/Assessment	N/A	-	-	5	-	N/A
LLNL	OK-002LT	Lawrence Livermore National Laboratory Site 300 Remedial Action (Post 2006)						
		Release Sites/Cleanup	20	-	-	-	3	17
		Release Sites/Assessment	N/A	-	-	-	3	N/A
LBNL	OK-003	LBNL Soils and Groundwater (Environmental Restoration)						
		Release Sites/Cleanup	66	26	5	-	-	35
		Release Sites/Assessment	N/A	38	7	8	-	N/A
LBNL	OK-004	LBNL Hazardous Waste Handling Facility Closure (Environmental Restoration)						
		Facilities/Decommissioning - Cleanup	1	1	-	-	-	-
SLAC	OK-005	Stanford Linear Accelerator Center (Environmental Restoration)						
		Release Sites/Cleanup	9	-	1	2	4	2
		Release Sites/Assessment	N/A	2	1	1	5	N/A
ETEC	OK-007	ETEC Remediation						
		Facilities/Decommissioning - Cleanup	See below [a]	4	4	5	-	TBD
		Facilities/Decommissioning - Assessment	N/A	3	6	3	-	N/A
		Facilities/Deactivated	4	-	-	-	-	4
		Release Sites/Cleanup	2	2	-	-	-	-
ETEC	OK-007LT	ETEC Remediation (Post 2006)						
		Release Sites/Cleanup	5	-	-	-	-	5
		Release Sites/Assessment	N/A	2	-	-	3	N/A
		Facilities/Decommissioning - Cleanup	21	2	-	-	2	17
		Facilities/Decommissioning - Assessment	N/A	2	-	-	9	N/A
LEHR	OK-010	Laboratory for Energy-Related Health Research Environmental Restoration						
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Release Sites/Cleanup	16	-	1	-	6	9
		Release Sites/Assessment	N/A	14	-	1	-	N/A
GTF	OK-011	Soil Remediation (GTF)						
		Release Sites/Cleanup	2	2	-	-	-	-
GA	OK-012	Hot Cell Facility D&D at General Atomics						

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Facilities/Decommissioning - Cleanup	1	-	1	-	-	-
		Release Sites/Cleanup	2	1	-	-	-	1
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	1,715	-	-	TBD
		Low-Level Waste/Treatment (m^3)	210	42	8	-	-	160
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	5,709	793	617	178	-	4,121
		Low-Level Waste/Storage (m^3)	N/A	906	140	-	-	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	2	-	-	-	-	2
		Mixed Low-Level Waste/Storage (m^3)	N/A	13	1	-	-	N/A
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	13	-	1	-	TBD
GE	OK-013LT	General Electric D&D (Environmental Restoration)						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Facilities/Decommissioning - Assessment	N/A	-	-	-	2	N/A
LEHR	OK-014	LEHR Waste Management						
		Low-Level Waste/Commercial Disposal (m3)	See below [a]	-	498	270	504	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	1	-	-	633	TBD
		Low-Level Waste/Storage (m^3)	N/A	1,809	498	1,368	2,199	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	1	-	-	1	-	-
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	1	50	N/A
LBNL	OK-015	LBNL Legacy Waste						
		Low-Level Waste/Treatment (m^3)	See below [a]	-	27	30	8	TBD
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	27	30	8	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	37	-	-	-	-	37
		Low-Level Waste/Storage (m^3)	N/A	-	58	28	18	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	-	TBD
LBNL	OK-016	LBNL Newly Generated Wastes						
		Low-Level Waste/Storage (m^3)	N/A	79	33	27	-	N/A
		Low-Level Waste/Treatment (m^3)	See below [a]	30	29	50	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	8	-	-	-	-	8
		Low-Level Waste/Commercial Disposal (m^3)	91	-	29	50	-	12
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	4	9	1	-	TBD
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	4	9	-	-	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	7	-	4	3	-	-
		Mixed Low-Level Waste/Storage (m^3)	N/A	18	11	12	-	N/A
		Transuranic Waste/Storage (m^3)	N/A	1	1	1	-	N/A
LLNL	OK-021	LLNL Base Program						
		Low-Level Waste/Storage (m^3)	N/A	1,618	1,711	1,655	-	N/A
		Low-Level Waste/Commercial Disposal (m^3)	282	-	-	-	-	282
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	3,455	778	691	573	-	1,413
		Low-Level Waste/Treatment (m^3)	2,651	101	132	43	-	2,375
		Mixed Low-Level Waste/Storage (m^3)	N/A	599	691	550	-	N/A

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Performance Measure Quantities: Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	196	433	149	-	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	321	149	-	TBD
		Transuranic Waste/Storage (m^3)	N/A	292	300	300	-	N/A
		Transuranic Waste/Treatment (m^3)	53	-	-	-	-	53
LLNL	OK-021LT	LLNL Base Program (Post 2006)						
		Low-Level Waste/Storage (m^3)	N/A	-	-	-	1,400	N/A
		Low-Level Waste/Treatment (m^3)	See below [a]	-	-	-	436	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	-	-	-	390	TBD
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	26	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	25	TBD
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	-	-	92	TBD
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	-	384	N/A
		Transuranic Waste/Storage (m^3)	N/A	-	-	-	349	N/A
ETEC	OK-042	ETEC Waste Management						
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [b]	1,732	836	283	-	TBD
		Low-Level Waste/Storage (m^3)	N/A	1,652	206	1,286	-	N/A
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	55	-	-	TBD
		Low-Level Waste/Treatment (m^3)	See below [a]	-	-	50	-	TBD
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	3	115	-	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	2	25	-	TBD
		Mixed Low-Level Waste/Storage (m^3)	N/A	9	17	242	-	N/A
		Transuranic Waste/Storage (m^3)	N/A	8	11	11	-	N/A
ETEC	OK-042LT	ETEC Waste Management (Post 2006)						
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	-	-	-	500	TBD
		Low-Level Waste/Storage (m^3)	N/A	-	-	-	1,200	N/A
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	-	-	20	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	5	TBD
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	-	240	N/A
		Transuranic Waste/Storage (m^3)	N/A	-	-	-	11	N/A
SPRU	OK-043	SPRU						
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	50	-	-	-	-	50
SPRU	OK-043LT	SPRU (Post 2006)						
		Release Sites/Cleanup	8	-	-	-	-	8
		Facilities/Decommissioning - Cleanup	11	-	-	-	-	11
Oak Ridge								

[a] EM is refining the life-cycle quantity estimate for this project.

[b] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
ORR	OR-151	ORR Legacy Waste						
		Low-Level Waste/Storage (m^3)	N/A	-	50,477	55,834	54,130	N/A
		Low-Level Waste/On-Site Disposal (m^3)	1,963	-	-	-	-	1,963
		Low-Level Waste/Treatment (m^3)	10,700	-	-	1,300	101	9,299
		Low-Level Waste/Commercial Disposal (m^3)	38,052	-	87	806	479	36,680
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	534,306	-	-	-	7,116	527,190
		Mixed Low-Level Waste/Treatment (m^3)	13,446	-	1,600	650	1,862	9,334
		Mixed Low-Level Waste/Commercial Disposal (m^3)	40,778	-	2,023	621	2,121	36,013
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	21,423	11,273	6,618	N/A
		Transuranic Waste/Storage (m^3)	N/A	-	1,923	2,081	2,171	N/A
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	1,592	-	-	-	-	1,592
		Transuranic Waste/Treatment (m^3)	2,245	-	-	-	-	2,245
ORR	OR-171	Environmental Management Waste Management Facility						
		Release Sites/Cleanup	1	-	-	-	-	1
		Release Sites/Assessment	N/A	-	1	-	-	N/A
ORR	OR-211	Y-12 Waste Operations						
		Low-Level Waste/Commercial Disposal (m^3)	4,968	-	-	26	-	4,942
		Low-Level Waste/Treatment (m^3)	12,915	-	-	180	180	12,555
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	33,539	-	-	-	-	33,539
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	140	1,091	-	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	16,211	-	-	1,479	90	14,642
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	-	9	N/A
ORR	OR-221	Y-12 Remedial Action						
		Release Sites/Cleanup	116	1	4	1	1	109
		Release Sites/Assessment	N/A	3	1	15	-	N/A
		Facilities/Decommissioning - Assessment	N/A	-	-	2	-	N/A
ORR	OR-231	Y-12 Decontamination & Decommissioning						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
ORR	OR-311	ORNL Waste Operations - Def						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	304	-	TBD
		Low-Level Waste/On-Site Disposal (m^3)	See below [a]	-	85	-	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	34,287	-	-	-	-	34,287
		Low-Level Waste/Treatment (m^3)	145,660	-	2,065	-	1,995	141,600
ORR	OR-321	ORNL Remedial Action - Def						
		Facilities/Decommissioning - Cleanup	49	1	-	2	5	41
		Facilities/Decommissioning - Assessment	N/A	-	5	42	-	N/A

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Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	6,525	-	-	-	-	6,525
		Release Sites/Cleanup	216	3	8	72	11	122
		Release Sites/Assessment	N/A	15	79	83	4	N/A
		Transuranic Waste/Storage (m^3)	N/A	-	382	382	382	N/A
ORR	OR-331	ORNL Decontamination & Decommissioning - Def						
		Facilities/Decommissioning - Assessment	N/A	-	7	-	-	N/A
		Facilities/Decommissioning - Cleanup	21	-	-	-	-	21
		Release Sites/Assessment	N/A	-	23	-	-	N/A
		Release Sites/Cleanup	25	-	-	6	-	19
ORR	OR-381	ORNL Nuclear Materials & Facilities Stabilization - Def						
		Nuclear Materials/Stabilized- Other NM Solution (liters)	See below [a]	-	492	-	-	TBD
		Nuclear Materials/Made Disposition Ready - Other NM Solution (liters)	See below [a]	-	492	-	-	N/A
		Nuclear Materials/Made Disposition Ready - Other Forms of NM (containers)	3	-	-	1	-	2
		Nuclear Materials/Stabilized - Other NM Forms (handling units)	4	-	-	-	-	4
		Facilities/Deactivated	9	-	2	-	-	7
ORR	OR-411	ETTP Waste Operations						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	16	-	TBD
		Low-Level Waste/Treatment (m^3)	See below [a]	-	7	-	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	10	-	-	-	-	10
		Mixed Low-Level Waste/Commercial Disposal (m^3)	8,425	-	70	134	241	7,980
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	-	72	N/A
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	719	472	-	TBD
ORR	OR-423	ETTP Remedial Action (D&D Fund)						
		Facilities/Decommissioning - Cleanup	6	-	2	-	-	4
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	1,113	1,166	2,000	TBD
		Release Sites/Cleanup	163	-	1	-	4	158
		Release Sites/Assessment	N/A	6	-	1	12	N/A
ORR	OR-433	ETTP Decontamination & Decommissioning (D&D Fund)						
		Release Sites/Cleanup	2	-	-	-	-	2
		Facilities/Decommissioning - Cleanup	121	35	4	-	-	82
		Facilities/Decommissioning - Assessment	N/A	38	-	1	-	N/A
ORR	OR-443	ETTP Surveillance & Maintenance (D&D Fund)						
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1

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Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Release Sites/Cleanup	1	-	-	-	-	1
		Release Sites/Assessment	N/A	-	-	1	-	N/A
ORR	OR-493	ETTP - ORO Prime Contracts						
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	3,537	3,571	-	TBD
		Release Sites/Cleanup	2	-	-	-	-	2
		Release Sites/Assessment	N/A	-	-	2	-	N/A
		Facilities/Decommissioning - Cleanup	6	-	-	-	-	6
		Facilities/Decommissioning - Assessment	N/A	-	2	2	-	N/A
Paducah	OR-523	Paducah Remedial Action						
		Release Sites/Cleanup	147	2	1	1	-	143
		Release Sites/Assessment	N/A	18	2	-	19	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	14,000	-	-	-	-	14,000
Paducah	OR-553	Paducah Waste Management						
		Low-Level Waste/Treatment (m^3)	427	-	7	-	420	-
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	104	-	-	-	90	14
		Low-Level Waste/Commercial Disposal (m^3)	5,519	-	120	-	910	4,489
		Low-Level Waste/On-Site Disposal (m^3)	6,564	-	548	-	300	5,716
		Low-Level Waste/Storage (m^3)	N/A	-	99,802	6,960	6,564	N/A
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	4,224	3,930	3,983	N/A
		Mixed Low-Level Waste/On-Site Disposal (m^3)	2	-	-	-	-	2
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	630	-	21	115	140	354
		Mixed Low-Level Waste/Treatment (m^3)	671	-	13	44	25	589
		Mixed Low-Level Waste/Commercial Disposal (m^3)	4,819	-	8	6	670	4,135
		Transuranic Waste/Storage (m^3)	N/A	-	5	5	5	N/A
		Transuranic Waste/Treatment (m^3)	6	-	-	-	-	6
Portsmouth	OR-623	Portsmouth Remedial Action						
		Release Sites/Cleanup	16	-	1	1	9	5
		Release Sites/Assessment	N/A	1	2	-	-	N/A
		Mixed Low-Level Waste/Commercial Disposal (m^3)	83	-	-	-	-	83
Portsmouth	OR-643	Portsmouth Surveillance & Maintenance						
		Mixed Low-Level Waste/Commercial Disposal (m^3)	846	-	-	-	-	846
Portsmouth	OR-653	Portsmouth Waste Management						
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	-	-	2	-	TBD
		Mixed Low-Level Waste/On-Site Disposal (m^3)	154	-	-	-	-	154
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	871	-	30	40	-	801
		Mixed Low-Level Waste/TBD Disposal (m^3)	2,773	-	-	-	-	2,773

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Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Low-Level Waste/TBD Disposal (m^3)	6,869	-	-	-	-	6,869
		Low-Level Waste/Commercial Disposal (m^3)	10,047	-	581	-	-	9,466
		Mixed Low-Level Waste/Commercial Disposal (m^3)	13,933	-	1,282	72	-	12,579
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	7,048	8,603	8,575	N/A
		Low-Level Waste/Storage (m^3)	N/A	-	17,433	14,387	15,825	N/A
WSSRAP	OR-715	Weldon Spring Waste Treatment						
		Release Sites/Cleanup	2	-	1	1	-	-
WSSRAP	OR-775	Weldon Spring Disposal Facility						
		Facilities/Decommissioning - Cleanup	2	1	-	1	-	-
		Release Sites/Cleanup	20	-	2	7	3	8
		Release Sites/Assessment	N/A	1	-	2	-	N/A
ORR	OR-821	Offsite Projects - Def.						
		Release Sites/Cleanup	5	-	-	-	-	5
Ohio								
Ashtabula	OH-AB-01	Remediation						
		Release Sites/Cleanup	3	-	-	-	-	3
		Facilities/Deactivated	26	10	2	3	-	11
		Facilities/Decommissioning - Cleanup	26	-	2	2	3	19
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,160	59	138	26	130	807
		Low-Level Waste/Storage (m^3)	N/A	-	2	2	-	N/A
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	19	19	19	N/A
Columbus	OH-CL-01	King Avenue Site Decontamination						
		Release Sites/Cleanup	1	-	-	1	-	-
		Facilities/Decommissioning - Cleanup	2	1	-	1	-	-
		Low-Level Waste/Commercial Disposal (m^3)	2	-	-	-	-	2
		Release Sites/Assessment	N/A	-	-	1	-	N/A
Columbus	OH-CL-02-D	West Jefferson Site Decontamination (Defense)						
		Release Sites/Cleanup	1	-	-	-	-	1
		Facilities/Decommissioning - Cleanup	3	-	-	-	-	3
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	5	-	-	-	-	5
		Low-Level Waste/Commercial Disposal (m^3)	29	-	-	-	-	29
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,299	35	71	134	189	870
Fernald	OH-FN-01	Facility Shutdown						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	3,872	-	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	4,391	-	-	1,130	-	3,261
		Facilities/Deactivated	See below [a]	3	2	-	-	TBD
		Mixed Low-Level Waste/Ship to DOE Disposal Site	294	-	-	-	-	294

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		(m^3)						
Fernald	OH-FN-02	Facility D & D						
		Facilities/Decommissioning - Cleanup	19	2	2	1	1	13
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	180	-	-	-	-	180
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	8,070	-	-	715	643	6,712
Fernald	OH-FN-04	Aquifer Restoration						
		Release Sites/Cleanup	2	-	-	-	-	2
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	6,960	-	-	-	-	6,960
Fernald	OH-FN-05	Waste Pits Remediation Project						
		Release Sites/Cleanup	1	-	-	-	-	1
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	93	-	-	-	-	93
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	3,122	-	-	-	-	3,122
Fernald	OH-FN-06	Soils						
		Release Sites/Cleanup	1	-	-	-	-	1
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	230	-	-	-	-	230
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,217	-	-	-	-	1,217
Fernald	OH-FN-07	Silos						
		Release Sites/Cleanup	2	-	-	-	-	2
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	18,543	-	-	-	2,580	15,963
Fernald	OH-FN-08	Nuclear Materials						
		Nuclear Materials/Made Disposition Ready Ship Offsite - U Other Forms (kg bulk)	4,906,133	204,000	1,949,283	1,886,350	429,800	436,700
Fernald	OH-FN-10	Mixed Waste						
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	103	-	232	215	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	108	108	TBD
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	510	-	132	-	-	378
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	518	427	212	N/A
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,954	-	-	784	211	959
Fernald	OH-FN-11	Waste Management						
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	355	3,055	3,369	1,897	TBD
		Low-Level Waste/Treatment (m^3)	See below [a]	-	-	-	2,909	TBD
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	2,392	TBD
		Low-Level Waste/Storage (m^3)	N/A	23,900	4,942	4,942	3,703	N/A
Fernald	OH-FN-13	Post Source Term Removal Projects						

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Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	381	-	-	-	-	381
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	1,263	-	-	-	-	1,263
Miamisburg	OH-MB-02	Main Hill Tritium						
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Facilities/Deactivated	4	-	-	-	-	4
Miamisburg	OH-MB-03	Waste Activities						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	3,928	-	-	TBD
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	19,824	2,200	4,417	2,407	3,338	7,462
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	1	10	-	-	TBD
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	See below [a]	-	1	-	-	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	24	-	19	-	-	5
		Nuclear Materials/Made Disposition Ready Ship Offsite - U Other Forms (kg bulk)	See below [a]	2	-	-	-	TBD
		Nuclear Materials/Made Disposition Ready - Pu Metal/Oxides/Other (containers)	4	2	2	-	-	-
		Nuclear Materials/Made Disposition Ready Onsite - U Other Forms (kg bulk)	7	-	7	-	-	-
		Nuclear Materials/Made Disposition Ready - Other Forms of NM (containers)	27	2	9	2	-	14
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	247	-	-	-	-	247
		Transuranic Waste/Storage (m^3)	N/A	247	247	247	247	N/A
Miamisburg	OH-MB-04	Main Hill Rad						
		Facilities/Deactivated	4	1	-	1	-	2
		Facilities/Decommissioning - Cleanup	7	1	-	-	1	5
		Facilities/Decommissioning - Assessment	N/A	1	-	1	-	N/A
Miamisburg	OH-MB-05	Main Hill Non Rad						
		Facilities/Deactivated	33	3	3	1	3	23
		Facilities/Decommissioning - Cleanup	33	2	2	2	1	26
		Facilities/Decommissioning - Assessment	N/A	2	5	1	2	N/A
Miamisburg	OH-MB-06	SM/PP Hill						
		Release Sites/Cleanup	3	-	-	-	-	3
		Release Sites/Assessment	N/A	-	-	-	1	N/A
		Facilities/Decommissioning - Cleanup	26	10	4	1	-	11
		Facilities/Deactivated	26	9	2	1	2	12
		Facilities/Decommissioning - Assessment	N/A	12	5	1	1	N/A
Miamisburg	OH-MB-07	Test Fire Valley						
		Release Sites/Cleanup	1	-	-	-	-	1
		Facilities/Deactivated	44	12	1	1	1	29

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Facilities/Decommissioning - Cleanup	44	7	3	-	1	33
		Facilities/Decommissioning - Assessment	N/A	7	4	1	1	N/A
Miamisburg	OH-MB-08	Soils						
		Release Sites/Cleanup	135	94	-	6	9	26
		Release Sites/Assessment	N/A	94	2	5	14	N/A
WVDP	OH-WV-01	HLW Vitrification and Tank Heel High Activity Waste Processing						
		High-Level Waste/Treatment (m^3)	962	780	73	40	-	69
		High-Level Waste/Storage (m^3)	N/A	182	109	69	-	N/A
WVDP	OH-WV-01LT	HLW Vitrification and Tank Heel High Activity Waste Processing (Post-2006)						
		High-Level Waste/Treatment (m^3)	See below [a]	-	-	-	69	TBD
WVDP	OH-WV-02	Site Transition, Decommissioning, & Project Completion						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	1,010	850	-	TBD
		Low-Level Waste/Storage (m^3)	N/A	16,295	16,303	16,381	-	N/A
		High-Level Waste/Canisters Produced	228	203	12	5	-	8
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	25	-	-	-	-	25
		Mixed Low-Level Waste/Treatment (m^3)	161	45	2	15	-	99
		Mixed Low-Level Waste/Storage (m^3)	N/A	149	146	150	-	N/A
		Transuranic Waste/Storage (m^3)	N/A	528	539	543	-	N/A
WVDP	OH-WV-02LT	Site Transition, Decommissioning, & Project Completion (Post-2006)						
		Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	-	425	TBD
		High-Level Waste/Canisters Produced	See below [a]	-	-	-	5	TBD
		Mixed Low-Level Waste/Treatment (m^3)	See below [b]	-	-	-	5	TBD
		Transuranic Waste/Storage (m^3)	N/A	-	-	-	547	N/A
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	-	-	164	N/A
		Low-Level Waste/Storage (m^3)	N/A	-	-	-	16,392	N/A
WVDP	OH-WV-03	Spent Nuclear Fuel						
		Spent Nuclear Fuel/Prepared and Shipped for Consolidation (MTHM)	27.000	-	-	-	-	27.000
WVDP	OH-WV-03LT	Spent Nuclear Fuel (Post-2006)						
		Spent Nuclear Fuel/Prepared and Shipped for Consolidation (MTHM)	See below [a]	-	-	-	26.320	TBD

[a] EM is refining the life-cycle quantity estimate for this project.

[b] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
Richland								
Hanford	RL-ER01	100 Area Remedial Action						
		Release Sites/Cleanup	511	11	15	27	11	447
		Release Sites/Assessment	N/A	291	-	46	-	N/A
Hanford	RL-ER02	200 Area Remedial Action						
		Release Sites/Cleanup	751	-	-	-	-	751
Hanford	RL-ER03	300 Area Remedial Action						
		Release Sites/Cleanup	156	2	1	14	2	137
		Release Sites/Assessment	N/A	4	-	121	-	N/A
Hanford	RL-ER06	Decontamination and Decommissioning						
		Facilities/Decommissioning - Cleanup	681	5	-	-	-	676
Hanford	RL-ST01	PNNL WASTE MANAGEMENT						
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Facilities/Deactivated During Period	16	-	-	-	-	16
		Nuclear Materials/Stabilized - Pu Residue (kg bulk)	1	-	-	-	-	1
		Nuclear Materials/Made Disposition Ready - Other Forms of NM (containers)	37	-	12	-	-	25
		Nuclear Materials/Stabilized - Other NM Forms (handling units)	410	-	-	-	-	410
		Nuclear Materials/Made Disposition Ready Onsite - U Other Forms (kg bulk)	3,174	-	-	-	-	3,174
		Nuclear Materials/Stabilized - U in Other Forms (kg bulk)	10,132	-	17	-	-	10,115
Hanford	RL-TP02	WESF Sub-Project						
		Facilities/Deactivated During Period	16	-	-	-	-	16
Hanford	RL-TP04	300 Area/SNM Sub-Project						
		Facilities/Deactivated During Period	14	-	-	-	-	14
		Nuclear Materials/Made Disposition Ready Onsite - U Other Forms (kg bulk)	1,862,000	-	-	-	-	1,862,000
Hanford	RL-TP05	PFP Deactivation						
		Facilities/Decommissioning - Cleanup	58	-	-	-	-	58
		Facilities/Deactivated During Period	58	-	-	-	-	58
		Nuclear Materials/Stabilized - Other NM Forms (handling units)	32	-	-	-	-	32
		Nuclear Materials/Made Disposition Ready - Other Forms of NM (containers)	32	-	-	-	-	32
		Nuclear Materials/Stabilized - Pu Solution (liters)	4,300	-	16	255	2,045	1,984
		Nuclear Materials/Made Disposition Ready - Pu Metal/Oxides/Other (containers)	3,138	-	-	-	-	3,138
		Nuclear Materials/Stabilized - Pu Residue (kg bulk)	3,765	-	-	29	-	3,736
		Nuclear Materials/Stabilized - Pu Metal/Oxides	5,845	-	150	400	500	4,795

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		(containers)						
Hanford	RL-TP08	324/327 Facility Transition Project						
		Facilities/Deactivated	6	-	-	-	-	6
Hanford	RL-TP10	Accelerated Deactivation						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Facilities/Deactivated	47	-	-	-	-	47
Hanford	RL-TP11	Advanced Reactors Transition						
		Facilities/Deactivated	5	-	-	-	-	5
Hanford	RL-TP13	Landlord Project						
		Facilities/Deactivated	529	3	51	21	7	447
		Facilities/Decommissioning - Cleanup	580	46	42	14	12	466
Hanford	RL-TP14	Hanford Surplus Facility Program 300 Area Revitalization Project						
		Facilities/Decommissioning - Cleanup	1	1	-	-	-	-
		Facilities/Deactivated	34	-	-	-	-	34
Hanford	RL-WM01	Spent Nuclear Fuels Project						
		Spent Nuclear Fuel/Prepared and Shipped for Consolidation (MTHM)	1	-	-	-	-	1
		Spent Nuclear Fuel/Moved to Dry Storage (MTHM)	2,122	-	-	-	233	1,889
		Facilities/Deactivated	22	-	-	-	-	22
Hanford	RL-WM02	Canister Storage Building Operations						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Facilities/Deactivated	2	-	-	-	-	2
Hanford	RL-WM03	Solid Waste Storage and Disposal						
		Mixed Low-Level Waste/On-Site Disposal (m^3)	86,763	-	182	835	1,052	84,694
		Mixed Low-Level Waste/Storage (m^3)	N/A	9,171	9,100	7,852	7,542	N/A
		Low-Level Waste/On-Site Disposal (m^3)	248,203	5,920	6,080	6,936	4,761	224,506
		Low-Level Waste/Storage (m^3)	N/A	180	180	180	180	N/A
		Transuranic Waste/Storage (m^3)	N/A	16,300	16,300	16,333	16,545	N/A
Hanford	RL-WM04	Solid Waste Treatment						
		Low-Level Waste/Treatment (m^3)	180	12	-	-	-	168
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	18,222	-	-	55	55	18,112
		Transuranic Waste/Treatment (m^3)	21,344	-	176	-	-	21,168
		Mixed Low-Level Waste/Treatment (m^3)	33,494	22	16	1,060	967	31,429
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	166	-	-	-	-	166
Hanford	RL-WM05	Liquid Effluents Project						
		Facilities/Deactivated	1	-	-	-	-	1
		High-Level Waste/Treatment (m^3)	80,975	-	3,830	3,600	6,620	66,925
Office of River Protection								

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
ORP	RL-TW03	Tank Farms Operations						
		Facilities/Deactivated	146	-	-	-	-	146
		High-Level Waste/Storage (m^3)	N/A	204,000	200,000	208,300	211,300	N/A
ORP	RL-TW04	Retrieval Project						
		Facilities/Deactivated	17	-	-	-	-	17
		Facilities/Decommissioning - Cleanup	166	-	-	-	-	166
		High-Level Waste/Treatment (m^3)	748,667	-	-	-	-	748,667
ORP	RL-TW06	Process Waste Privatization Phase I						
		Facilities/Decommissioning - Cleanup	1	-	-	-	-	1
		Facilities/Deactivated	1	-	-	-	-	1
		High-Level Waste/Canisters Produced	12,245	-	-	-	-	12,245
		High-Level Waste/Treatment (m^3)	198,926	-	-	-	-	198,926
ORP	RL-TW07	Process Waste Privatization Phase II						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Facilities/Deactivated	2	-	-	-	-	2
		High-Level Waste/Treatment (m^3)	548,350	-	-	-	-	548,350
ORP	RL-TW09	Immobilized Tank Waste Storage & Disposal Project						
		Facilities/Decommissioning - Cleanup	2	-	-	-	-	2
		Facilities/Deactivated	2	-	-	-	-	2
		High-Level Waste/Treatment (m^3)	17,164	-	-	-	-	17,164
		Low-Level Waste/On-Site Disposal (m^3)	251,593	-	-	-	-	251,593
Rocky Flats								
RFETS	RF001	Buffer Zone Closure Project						
		Release Sites/Cleanup	85	34	2	-	-	49
		Facilities/Decommissioning - Cleanup	58	-	-	-	-	58
		Release Sites/Assessment	N/A	41	10	-	-	N/A
RFETS	RF002	Waste Management Project						
		Facilities/Decommissioning - Cleanup	7	-	-	-	-	7
		Low-Level Waste/Storage (m^3)	N/A	9,576	12,208	13,344	40,883	N/A
		Low-Level Waste/Commercial Disposal (m^3)	1,314	-	-	-	-	1,314
		Low-Level Waste/Ship to DOE Disposal Site (m^3)	139,582	2,669	5,686	4,050	4,638	122,539
		Mixed Low-Level Waste/Storage (m^3)	N/A	8,114	5,822	3,587	6,583	N/A
		Mixed Low-Level Waste/TBD Disposal (m^3)	10,000	-	-	-	-	10,000
		Mixed Low-Level Waste/Treatment (m^3)	See below [a]	4,126	5,537	2,538	1,058	TBD
		Mixed Low-Level Waste/Commercial Disposal (m^3)	42,160	-	5,537	2,538	1,058	33,027
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	177	-	-	-	-	177
		Release Sites/Cleanup	1	-	-	-	-	1

[a] EM is refining the life-cycle quantity estimate for this project.

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Release Sites/Assessment	N/A	1	-	-	1	N/A
		Transuranic Waste/Storage (m^3)	N/A	1,849	3,963	7,203	7,747	N/A
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	14,870	-	65	1,000	2,000	11,805
RFETS	RF008	Pu Metals and Oxides Stabilization						
		Nuclear Materials/Made Disposition Ready - Pu Metal/Oxides/Other (containers)	1,900	-	-	720	960	220
RFETS	RF009	Pu Solid Residue Stabilization Project						
		Nuclear Materials/Stabilized - Pu Residue (kg bulk)	102,145	5,004	30,864	41,635	16,433	8,209
RFETS	RF013	Closure Caps Project						
		Release Sites/Cleanup	1	-	-	-	-	1
RFETS	RF014	Industrial Zone Closure Project						
		Release Sites/Cleanup	88	13	-	-	-	75
		Facilities/Decommissioning - Cleanup	335	24	-	-	1	310
		Facilities/Decommissioning - Assessment	N/A	-	2	-	-	N/A
RFETS	RF015	Miscellaneous Production Zone Cluster Closure Project						
		Release Sites/Cleanup	26	3	-	-	-	23
		Facilities/Decommissioning - Cleanup	128	3	7	-	9	109
		Facilities/Decommissioning - Assessment	N/A	8	8	-	10	N/A
RFETS	RF016	Building 371 Cluster Closure Project						
		Release Sites/Cleanup	2	-	-	-	-	2
		Facilities/Decommissioning - Cleanup	27	-	-	-	-	27
RFETS	RF017	Building 707/750 Cluster Closure Project						
		Release Sites/Cleanup	3	-	-	-	-	3
		Facilities/Decommissioning - Cleanup	58	2	-	-	-	56
RFETS	RF018	Building 771/774 Cluster Closure Project						
		Release Sites/Cleanup	22	-	-	-	-	22
		Release Sites/Assessment	N/A	-	1	-	-	N/A
		Facilities/Decommissioning - Cleanup	50	-	-	-	-	50
		Facilities/Decommissioning - Assessment	N/A	-	33	-	-	N/A
RFETS	RF019	Building 776/777 Cluster Closure Project						
		Release Sites/Cleanup	15	-	-	-	-	15
		Facilities/Decommissioning - Cleanup	21	-	-	-	-	21
		Facilities/Decommissioning - Assessment	N/A	-	20	-	-	N/A
RFETS	RF020	Building 881 Cluster Closure Project						
		Release Sites/Cleanup	8	-	-	-	-	8
		Facilities/Decommissioning - Cleanup	35	2	-	-	-	33
RFETS	RF021	Building 991 Cluster Closure Project						
		Release Sites/Cleanup	4	-	-	-	-	4
		Facilities/Decommissioning - Cleanup	14	-	-	-	-	14
RFETS	RF022	Building 779 Cluster Closure Project						

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Facilities/Decommissioning - Cleanup	24	-	3	21	-	-
		Release Sites/Cleanup	5	-	-	-	-	5
Savannah River								
SRS	SR-ER01	Flood Plain Swamp Project						
		Release Sites/Cleanup	38	12	4	-	-	22
		Release Sites/Assessment	N/A	12	4	-	3	N/A
SRS	SR-ER02	Four Mile Branch Project						
		Release Sites/Cleanup	66	14	2	-	1	49
		Release Sites/Assessment	N/A	14	3	-	3	N/A
SRS	SR-ER03	Lower Three Runs & Operations Project						
		Release Sites/Cleanup	67	14	1	6	-	46
		Release Sites/Assessment	N/A	14	2	6	-	N/A
SRS	SR-ER04	Pen Branch Project						
		Release Sites/Cleanup	34	6	2	-	-	26
		Release Sites/Assessment	N/A	6	2	3	-	N/A
SRS	SR-ER05	Steel Creek Project						
		Release Sites/Cleanup	30	4	4	2	-	20
		Release Sites/Assessment	N/A	7	5	-	1	N/A
SRS	SR-ER06	Upper Three Runs Project						
		Release Sites/Cleanup	143	49	10	2	-	82
		Release Sites/Assessment	N/A	52	13	1	1	N/A
SRS	SR-FA06	235-F Deactivation Project						
		Facilities/Deactivated	1	-	-	-	-	1
SRS	SR-FA08	P Reactor Deactivation Project						
		Facilities/Deactivated	3	-	-	-	-	3
SRS	SR-FA09	C Reactor Deactivation Project						
		Facilities/Deactivated	2	-	-	-	-	2
SRS	SR-FA10	R Reactor Deactivation Project						
		Facilities/Deactivated	2	-	-	-	-	2
SRS	SR-FA11	K Reactor Deactivation Project						
		Facilities/Deactivated	4	-	-	-	-	4
SRS	SR-FA12	L Reactor Deactivation Project						
		Facilities/Deactivated	4	-	-	-	-	4
SRS	SR-FA14	D Area Deactivation Project						
		Facilities/Deactivated	1	-	-	-	-	1
SRS	SR-FA15	M Area Deactivation Project						
		Facilities/Deactivated	11	-	-	-	-	11
SRS	SR-FA18	M Area Monitoring Project						
		Mixed Low-Level Waste/Treatment (m^3)	2,545	2,048	439	-	-	58
		Mixed Low-Level Waste/Storage (m^3)	N/A	1,254	1,205	-	-	N/A
SRS	SR-HL01	H-Tank Farm						

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		High-Level Waste/Storage (m^3)	N/A	73,086	67,202	68,631	69,883	N/A
SRS	SR-HL02	F-Tank Farm						
		High-Level Waste/Storage (m^3)	N/A	55,107	55,974	55,420	55,992	N/A
SRS	SR-HL04	Waste Pretreatment						
		High-Level Waste/Storage (m^3)	N/A	-	6,875	8,561	6,555	N/A
SRS	SR-HL05	Vitrification						
		High-Level Waste/Canisters Produced	5,647	419	236	200	200	4,592
		High-Level Waste/Treatment (m^3)	41,585	871	683	583	583	38,865
SRS	SR-HL08	Saltstone						
		Low-Level Waste/On-Site Disposal (m^3)	414,201	2,052	-	-	-	412,149
SRS	SR-NM01	F-Area Stabilization Project						
		Nuclear Materials/Made Disposition Ready - Other Forms of NM (containers)	684	-	-	-	-	684
		Nuclear Materials/Made Disposition Ready - Pu Metal/Oxides/Other (containers)	1,158	-	-	-	-	1,158
		Nuclear Materials/Stabilized - Pu Metal/Oxides (containers)	1,531	80	125	-	-	1,326
		Nuclear Materials/Made Disposition Ready - Other NM Solution (liters)	7,800	-	6,200	-	-	1,600
		Nuclear Materials/Stabilized - Pu Residue (kg bulk)	4,035	-	169	128	199	3,539
		Nuclear Materials/Stabilized - Other NM Forms (handling units)	19,730	147	438	132	457	18,556
		Nuclear Materials/Stabilized- Other NM Solution (liters)	33,700	-	-	-	-	33,700
		Nuclear Materials/Stabilized - Pu Solution (liters)	34,000	-	-	-	-	34,000
		Nuclear Materials/Stabilized - U Solution (liters)	530,000	-	-	-	-	530,000
		Nuclear Materials/Made Disposition Ready Onsite - U Solution (liters)	3,474,257	-	-	-	-	3,474,257
SRS	SR-SF09	Spent Nuclear Fuel Treatment and Storage						
		Spent Nuclear Fuel/Prepared and Shipped for Consolidation (MTHM)	20	-	-	-	-	20
SRS	SR-SW01	Consolidated Incinerator Facility						
		Low-Level Waste/Treatment (m^3)	17,155	-	573	120	-	16,462
		Mixed Low-Level Waste/Treatment (m^3)	5,318	853	862	377	473	2,753
		Mixed Low-Level Waste/Storage (m^3)	N/A	-	151	144	135	N/A
SRS	SR-SW02	Transuranic Waste Project						
		Transuranic Waste/Treatment (m^3)	1,500	-	-	112	112	1,276
		Transuranic Waste/Shipped to WIPP for Disposal (m^3)	19,874	-	-	8	34	19,832
		Transuranic Waste/Storage (m^3)	N/A	10,837	10,918	11,512	11,504	N/A
SRS	SR-SW03	Mixed Low Level Waste Project						

Ops Office/ Installation	Project Number	Project Name / Measure	Life-Cycle Quantity (1997-2070)	Prior to FY 1999	FY 1999 Actuals	FY 2000 Estimates	FY 2001 Estimates	Balance Remaining
			Performance Measure Quantities					
		Mixed Low-Level Waste/Commercial Disposal (m^3)	See below [a]	-	-	50	100	TBD
		Mixed Low-Level Waste/Ship to DOE Disposal Site (m^3)	2	-	-	1	1	-
		Mixed Low-Level Waste/Treatment (m^3)	398	282	23	12	6	75
		Mixed Low-Level Waste/TBD Disposal (m^3)	4,009	-	-	-	-	4,009
		Mixed Low-Level Waste/Storage (m^3)	N/A	867	825	1,920	1,363	N/A
SRS	SR-SW04	Low Level Waste Project						
		Low-Level Waste/Commercial Disposal (m^3)	14,331	-	-	4,160	-	10,171
		Low-Level Waste/On-Site Disposal (m^3)	81,815	2,371	8,792	8,409	4,043	58,200
		Low-Level Waste/Treatment (m^3)	104,250	6,117	4,318	6,368	5,890	81,557
		Low-Level Waste/Storage (m^3)	N/A	18,040	14,448	14,413	10,368	N/A

[a] EM is refining the life-cycle quantity estimate for this project.

Defense Environmental Restoration and Waste Management

Proposed Appropriation Language

For Department of Energy expenses, including the purchase, construction and acquisition of plant and capital equipment and other expenses necessary for atomic energy defense environmental restoration and waste management activities in carrying out the purposes of the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), including the acquisition or condemnation of any real property or any facility or for plant or facility acquisition, construction, or expansion; and the purchase of [35] *67* passenger motor vehicles for replacement only, [$4,484,349,000] *$4,551,527,000*, to remain available until expended: *Provided*, That any amounts appropriated under this heading that are used to provide economic assistance under section 15 of the Waste Isolation Pilot Plant Land Withdrawal Act (Public Law 102-579) shall be utilized to the extent necessary to reimburse costs of financial assurances required of a contractor by any permit or license of the Waste Isolation Pilot Plant issued by the State of New Mexico. *(Energy and Water Development Appropriations Act, 2000.)*

Explanation of Change

Change in appropriation language relates to the number of motor vehicles.

Defense Environmental Restoration and Waste Management

Program Mission

The Environmental Management (EM) program is responsible for managing and addressing the environmental legacy resulting from the production of nuclear weapons and nuclear research. The nuclear weapons complex generated waste, pollution, and contamination which pose unique problems, including unprecedented volumes of contaminated soil and water, radiological hazards from special nuclear material, and a vast number of contaminated structures. Factories, laboratories, and thousands of square miles of land were devoted to the enterprise of producing tens of thousands of nuclear weapons for national security purposes. Much of this massive infrastructure, waste, and contamination still exists and is largely maintained, decommissioned, managed, and remediated by the EM program. EM's responsibilities include facilities and areas located in 30 states and one territory that occupy an area equal to that of the States of Rhode Island and Delaware combined -- or about two million acres.

The FY 2001 request for the Defense Environmental Restoration and Waste Management appropriation is $4,551,527,000, an increase of $84,219,000 from the FY 2000 appropriation.

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 workforce and the public, and reduce the financial burden on the taxpayer. The FY 2001 budget request reflects the EM program's emphasis on completion of projects and sites.

Program Objectives

- Address environmental risks across the DOE complex and ensure that facilities and activities pose no undue risks to the public and worker safety and health.
- Be in compliance with applicable environmental and other requirements and meet compliance milestones.
- Continue surveillance and maintenance of facilities.

Performance Measures

EM produces a performance-based budget that demonstrates the program and project results expected for the resources requested. EM program performance measures can be found in the site details that follow this overview.

Significant Accomplishments and Program Shifts

Re-engineering Waste Management: This effort transfers responsibility from EM to the Office of Science for newly-generated waste at the Pacific Northwest National Laboratory managed by the Richland Operations Office. This concept, endorsed by the National Academy of Sciences and others, holds waste generators and their mission programs more accountable for the waste they generate by having them pay for the treatment, storage, and disposal of their newly-generated waste. This transfer is in accordance with the Memorandum of Agreement between EM and and the Office of Science dated April 12, 1999.

Funding Profile

(dollars in thousands)

	FY 1999 Current Appropriation	FY 2000 Original Appropriation	FY 2000 Adjustments	FY 2000 Current Appropriation	FY 2001 Request
Defense Environmental Restoration and Waste Management					
Post 2006 Completion	2,728,518	2,986,548	-47,054	2,939,494	3,108,457
Site/Project Completion	1,032,762	984,592	-13,123	971,469	970,951
Program Direction	337,073	339,409	0	339,409	359,888
Science & Technology	236,715	230,500	-1,087	229,413	196,548
Source for Proposed Supplemental	0	0	-13,000	-13,000	0
Subtotal, Defense	4,335,068	4,541,049	-74,264	4,466,785	4,635,844
Use of Prior Year Balances	-29,447	-40,000	36,223	-3,777	-34,317
Contractor Travel Savings	0	-6,000	6,000	0	0
Dupont Pension (Offset)	0	-8,700	0	-8,700	-50,000
Y2K Supplemental	10,340	0	0	0	0
Directed Savings	0	-2,000	2,000	0	0
Add-back of Proposed Supplemental	0	0	13,000	13,000	0
Total, Defense	4,315,961	4,484,349	-17,041 [a]	4,467,308	4,551,527

[a] Reflects distribution of congressional below-the-line reductions, approved reprogrammings, and a congressional rescission. Also includes the deduction and add-back of sources for a proposed Departmental supplemental budget request.

Public Law Authorization:

Public Law 106-60, “The Energy and Water Development Appropriations Act, 2000"
Public Law 95-91, “Department of Energy Organization Act (1977)”
Public Law 103-62, “Goverment Performance and Results Act of 1993"
Public Law 106-65, “The National Defense Authorization Act for Fiscal Year 2000"
Public Law 102-579, “Waste Isolation Pilot Plant Land Withdrawal Act (1992)”

Funding by Site

(dollars in thousands)

	FY 1999	FY 2000	FY 2001	$ Change	% Change
Albuquerque Operations Office					
Albuquerque Operations Office	10,021	9,379	16,730	7,351	78.4%
Grand Junction Office	1,200	1,194	1,200	6	0.5%
Kansas City Plant	1,706	1,742	3,500	1,758	100.9%
Los Alamos National Laboratory	81,106	90,522	92,129	1,607	1.8%
Pantex Plant	11,251	14,829	12,919	-1,910	-12.9%
Pinellas Plant	2,797	2,787	7,522	4,735	169.9%
Sandia National Laboratories	29,353	24,807	35,000	10,193	41.1%
Total, Albuquerque Operations Office	137,434	145,260	169,000	23,740	16.3%
Carlsbad Area Office					
Waste Isolation Pilot Plant	185,405	181,417	194,498	13,081	7.2%
Chicago Operations Office					
Chicago Operations Office	0	0	914	914	100.0%
Idaho Operations Office					
Idaho National Engineering and Environmental Laboratory	421,521	395,575	449,403	53,828	13.6%
Nevada Operations Office					
Nevada Operations Office	7,702	11,085	11,323	238	2.1%
Nevada Test Site	72,379	76,386	78,889	2,503	3.3%
Total, Nevada Operations Office	80,081	87,471	90,212	2,741	3.1%
Oakland Operations Office					
Energy Technology Engineering Center	500	0	0	0	0.0%
Lawrence Livermore National Laboratory	47,665	46,447	50,500	4,053	8.7%
Oakland Operations Office	3,755	783	882	99	12.6%
Separations Process Research Unit	0	489	2,500	2,011	411.2%
Total, Oakland Operations Office	51,920	47,719	53,882	6,163	12.9%

	(dollars in thousands)				
	FY 1999	FY 2000	FY 2001	$ Change	% Change
Oak Ridge Operations Office					
East Tennessee Tech Park	39,434	40,554	34,610	-5,944	-14.7%
Oak Ridge National Laboratory	8,606	67,234	72,802	5,568	8.3%
Oak Ridge Operations Office	5,860	7,353	13,332	5,979	81.3%
Oak Ridge Reservation	96,728	104,619	112,155	7,536	7.2%
Oak Ridge Off-site Locations	1,826	3,692	14,442	10,750	291.2%
Y-12 Plant	25,216	39,395	46,555	7,160	18.2%
Total, Oak Ridge Operations Office	177,670	262,847	293,896	31,049	11.8%
Richland Operations Office					
Hanford Site	645,876	680,259	682,189	1,930	0.3%
Office of River Protection	310,445	338,457	382,139	43,682	12.9%
Pacific Northwest National Lab	14,620	13,681	14,874	1,193	8.7%
Richland Operations Office	29,229	24,425	27,717	3,292	13.5%
Total, Richland Operations Office	1,000,170	1,056,822	1,106,919	50,097	4.7%
Savannah River					
Savannah River Operations Office	32,328	35,539	25,844	-9,695	-27.3%
Savannah River Site	1,187,224	1,163,605	1,241,040	77,435	6.7%
Total, Savannah River Operations Office	1,219,552	1,199,144	1,266,884	67,740	5.6%
Multi-Site Activities	77,439	82,790	43,300	-39,490	-47.7%
EH Health Studies	12,000	0	0	0	0.0%
PD Reprogramming Sources	0	19,000	0	-19,000	0.0%
Idaho TMI Reprogramming Sources	0	5,200	0	-5,200	0.0%
FFTF Reprogramming Sources	0	9,000	0	-9,000	0.0%
Science and Technology	236,715	228,131	196,548	-31,583	-13.8%
Program Direction	337,073	339,409	359,888	20,479	6.0%
D&D Fund Deposit	398,088	420,000	420,000	0	0.0%
Subtotal, Defense ER&WM	4,335,068	4,479,785	4,645,344	165,559	3.7%
Use of Prior Year Balances	-29,447	-3,777	-34,317	-30,540	808.6%
Contractor Travel Savings	0	0	-9,500	-9,500	>999%
Y2K Supplemental	10,340	0	0	0	0.0%
Dupont Pension (Offset)	0	-8,700	-50,000	-41,300	474.7%
Total, Defense ER&WM	4,315,961	4,467,308	4,551,527	84,219	9.0%