

Appendix V: Pollution Prevention Budget Overview

To promote the integration, sustainability, and conservation of natural assets into all activities, the Department of Defense (DoD) uses pollution prevention as its preferred approach to environmental management and as an integral part of day-to-day mission activities. Pollution Prevention Programs serve to reduce costs associated with environmental compliance efforts and orient DoD's environmental quality programs around a sustainability construct. Pollution prevention efforts at military installations reduce health and safety risks to DoD personnel and nearby communities, while encouraging comprehensive environmental planning at installations.

DoD's pollution prevention activities include reducing the use of toxic or harmful chemicals, eliminating the use of ozone-depleting substances (ODSs), and instituting green procurement programs. By pursuing pollution prevention activities across military activities, DoD minimizes its impacts on the environment and military and civilian communities while promoting sustainability.

DoD funds the Pollution Prevention Program through Operations and Maintenance and Procurement appropriations, and the Defense Working Capital Fund. Pollution prevention costs are distributed between two major categories: recurring and nonrecurring costs. Recurring costs are those day-to-day routine activities an installation must conduct in the implementation of pollution prevention program items, such as solid waste diversion and recycling, Toxics Release Inventory reporting, hazardous waste minimization, hazardous material reduction, and green procurement. While all recurring costs associated with Manpower and Education & Training were reported separately under compliance in previous years, these costs were distributed across the appropriate environmental program budgets beginning in Fiscal Year (FY) 2007.

Pollution prevention nonrecurring costs are one-time efforts that address unique or specific requirements. Nonrecurring costs are divided into six subcategories depending upon the affected media. The subcategories are: Hazardous Waste, Solid Waste, Clean Air Act (CAA), Clean Water Act (CWA), Hazardous Materials Reduction (HazMat), and Other nonrecurring costs. Other nonrecurring costs may include efforts to prepare and implement an acquisition strategy for alternative-fuel vehicles (excluding vehicle purchases or leases) and conversion of regular vehicles to alternative fuels. Pollution prevention nonrecurring costs fluctuate due to the completion or addition of one-time projects.

The funding requested for FY2010 will continue to support pollution prevention efforts as well as the implementation of Executive Order (E.O.) 13423: Strengthening Federal Environmental, Energy, and Transportation Management.

Figure V-1 DoD Pollution Prevention Budget Summary (millions)**†

Pollution Prevention Recurring Costs†							
	FY2004 Actual	FY2005 Actual	FY2006 Actual	FY2007 Actual	FY2008 Actual	FY2009 Appropriated	FY2010 Requested
Manpower	--	--	--	\$29.3	\$26.3	\$30.6	\$22.3
Education & Training	--	--	--	\$1.8	\$2.2	\$2.9	\$1.3
Other Recurring	\$52.3	\$42.0	\$55.4	\$48.6	\$49.4	\$60.1	\$39.9
Total	\$52.3	\$42.0	\$55.4	\$79.7	\$78.0	\$93.6	\$63.5
Pollution Prevention Nonrecurring Costs							
	FY2004 Actual	FY2005 Actual	FY2006 Actual	FY2007 Actual	FY2008 Actual	FY2009 Appropriated	FY2010 Requested
Hazardous Waste	\$8.2	\$7.0	\$7.8	\$5.8	\$6.0	\$12.5	\$6.3
Solid Waste	\$4.0	\$5.1	\$5.5	\$2.6	\$2.5	\$3.5	\$3.1
Clean Air Act	\$2.7	\$7.2	\$6.1	\$3.5	\$3.4	\$9.3	\$3.6
Clean Water Act	\$16.5	\$16.7	\$17.8	\$11.7	\$12.6	\$20.8	\$9.5
Hazardous Materials	\$20.3	\$28.4	\$12.3	\$10.5	\$8.0	\$8.2	\$6.7
Other	\$12.1	\$18.3	\$20.2	\$16.5	\$10.9	\$16.9	\$10.3
Total	\$63.8	\$82.7	\$69.8	\$50.5	\$43.3	\$71.2	\$39.3
Pollution Prevention Program Costs†							
	FY2004 Actual	FY2005 Actual	FY2006 Actual	FY2007 Actual	FY2008 Actual	FY2009 Appropriated	FY2010 Requested
Recurring	\$52.3	\$42.0	\$55.4	\$79.7	\$78.0	\$93.6	\$63.5
Nonrecurring	\$63.8	\$82.7	\$69.8	\$50.5	\$43.3	\$71.2	\$39.3
Total	\$116.1	\$124.7	\$125.2	\$130.2	\$121.3	\$164.8	\$102.9

* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

DoD

The implementation of pollution prevention solutions to regulatory provisions is contingent upon distributing funding across Pollution Prevention Programs. DoD's pollution prevention activities are part of the Department's overall sustainability strategy, recognizing that significant cost savings and beneficial environmental outcomes can result from such endeavors. As depicted in Figure V-1, DoD invested approximately \$121.3 million in pollution prevention activities during FY2008, which represents a decrease of \$8.9 million compared to the previous year. Of this FY2008 total, DoD invested \$43.3 million in nonrecurring costs, \$49.4 million in recurring costs (other than Manpower and Education & Training), and \$28.5 in Manpower and Education & Training costs.

Multi-year trends for DoD's Pollution Prevention Program show that recurring costs have increased, partially due to the inclusion of Manpower and Education & Training beginning in FY2007. DoD requested less funding for FY2010, as Components continue to meet existing pollution prevention goals.

Figure V-3 illustrates the costs for each nonrecurring subcategory. CWA and Other nonrecurring cost activities received the largest proportion of nonrecurring cost funding. Funding requested for FY2010 will continue to support pollution prevention program efforts that target hazardous materials, solid waste, toxic releases, air emissions, and water pollution at the source. Pollution prevention funding will also support the implementation of E.O 13423: Strengthening Federal Environmental, Energy, and Transportation Management.

Figure V-2 DoD Pollution Prevention Recurring and Nonrecurring Costs**

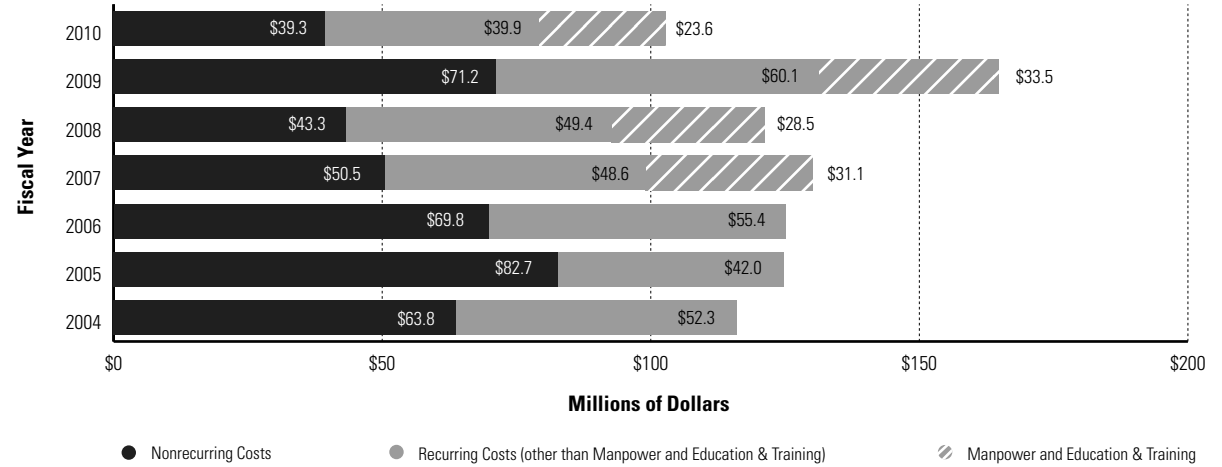
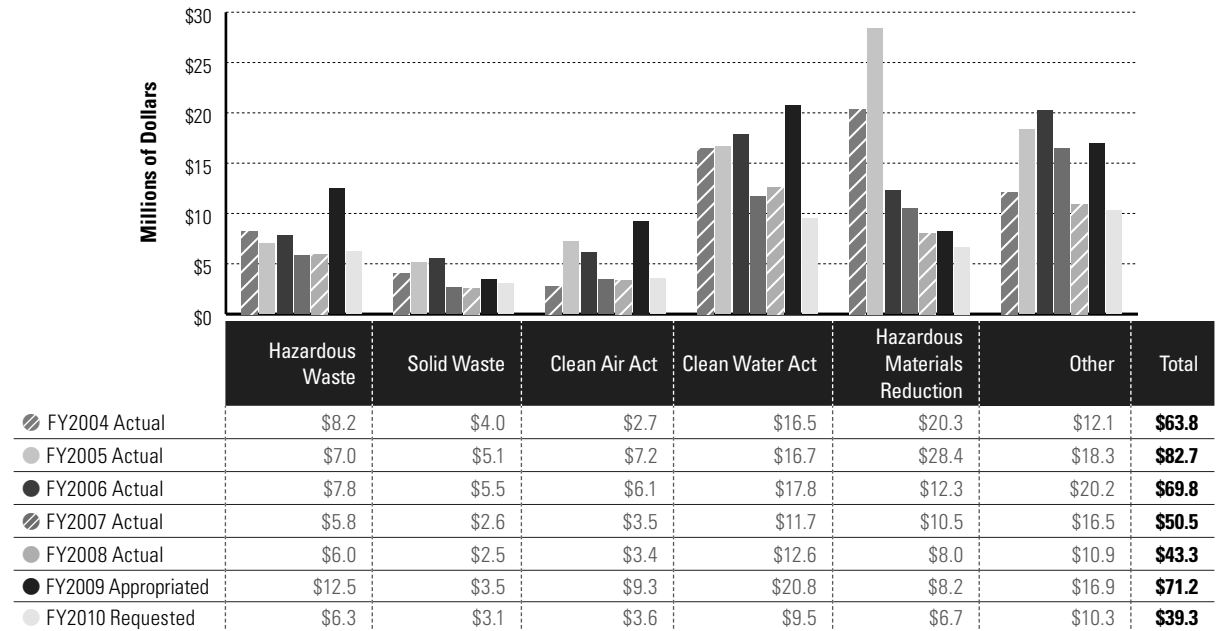


Figure V-3 DoD Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

Army

Army Pollution Prevention Programs are a vital element to its sustainability efforts, establishing forward-thinking solutions that enable progress beyond basic environmental compliance and facilitate avoidance of future costs. Pollution prevention helps Army installations reduce the number of accidents that can occur when using hazardous materials. The Army's Pollution Prevention Program focuses on implementing changes in chemicals, equipment, and processes in order to achieve meaningful, cost-effective reductions in the generation of pollution without adversely impacting mission readiness.

As depicted in Figure V-4, the Army's overall pollution prevention budget was \$28.7 million in FY2008, as compared with \$30.7 million in FY2007. Of this FY2008 total, the Army invested \$9.0 million in nonrecurring costs, \$10.6 million in recurring costs (other than Manpower and Education & Training), and \$9.0 million in Manpower and Education & Training costs. Beginning in FY2007, recurring costs for the Army's Pollution Prevention Programs increased due to the inclusion of Manpower and Education & Training. Recurring cost projections for FY2010 indicate reductions by approximately \$5.6 million due to the retirement of the Hazardous Substance Management System (HSMS) automation software and fielding of a substitute system to support the Hazardous Materials Management System (HMMS). This system uses a central database to decrease installation personnel and operation and maintenance costs. For FY2010, the operation costs for the HMMS are captured under the Army's Compliance Program budget. Similarly, nonrecurring cost projections for FY2010 indicate reductions by \$3.2 million as a result of completing regulatory priorities.

Figure V-5 displays nonrecurring costs associated with the Army's Pollution Prevention Program. Hazardous Materials Reduction and Hazardous Waste activities received the largest proportion of nonrecurring cost funding. Other nonrecurring costs included preparing and implementing an acquisition strategy for alternative fuel vehicles and emerging contaminant initiatives.

Figure V-4 Army Pollution Prevention Recurring and Nonrecurring Costs[†]

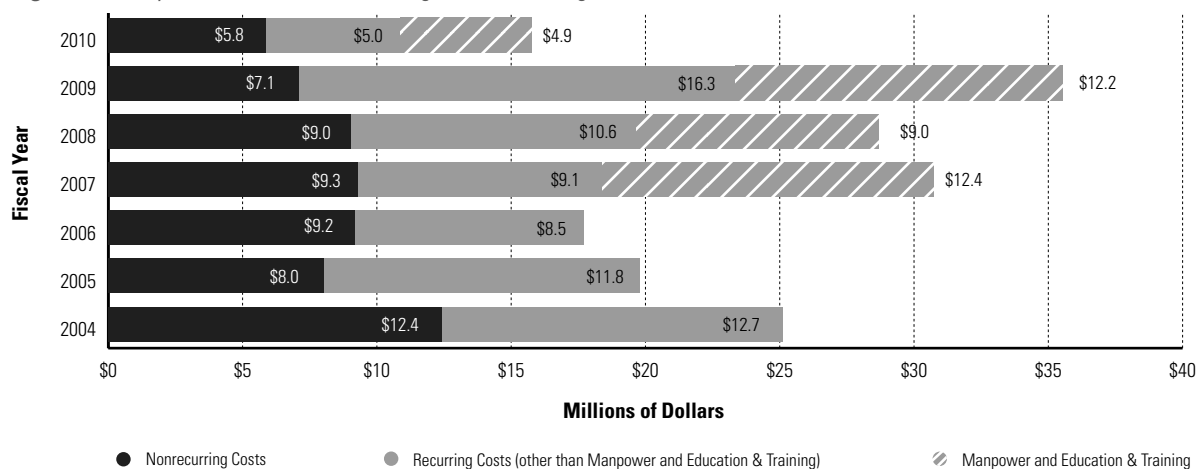


Figure V-5 Army Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

Navy and Marine Corps

The Department of the Navy's (DON's) pollution prevention budget, which includes the Navy and Marine Corps, funds projects to reduce or eliminate pollution at the source. Figure V-6 shows that DON invested \$30.2 million in pollution prevention activities during the reporting year, as compared with \$33.3 million in FY2007. Of the FY2008 total, DON invested \$9.3 million in nonrecurring costs, \$14.0 million in recurring costs (other than Manpower and Education & Training), and \$6.8 million in Manpower and Education & Training costs. Multi-year trends indicate that recurring costs increased significantly beginning in FY2006, and are projected to remain stable through FY2010.

As illustrated in Figure V-7, investments in pollution prevention projects declined beginning in FY2007. This decrease in nonrecurring costs from FY2007 through FY2010 is due to the completion of one-time projects and the attainment of the Department's pollution prevention goals. An increase in funding of pollution prevention activities is projected for FY2009 as a result of DON efforts to complete a Pollution Prevention Plan and related costs associated with upgrades to database tools necessary for accurate pollution forecasting.

Figure V-7 displays nonrecurring costs associated with DON's Pollution Prevention Program. CWA and Other activities comprise the largest proportion of nonrecurring cost activities during FY2008. DON requested additional funding in FY2010 to support the expansion of Solid Waste Compliance to combine all costs associated with trash collection and landfill disposal operations Naval Facilities and Engineering Command Marianas. Funding across all Navy and Marine Corps pollution prevention activities is projected to remain steady from FY2008 through FY2010.

Figure V-6 Navy and Marine Corps Pollution Prevention Recurring and Nonrecurring Costs**

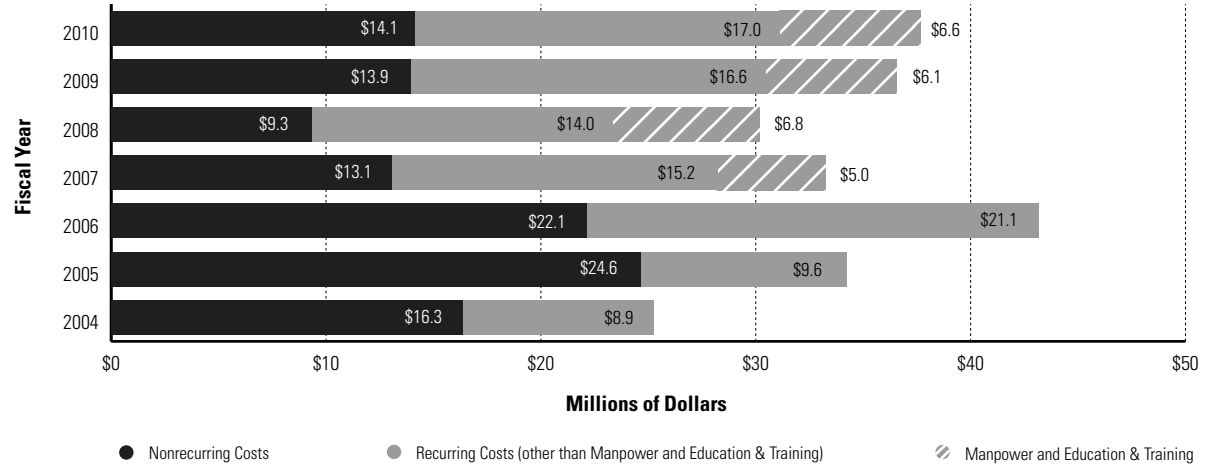
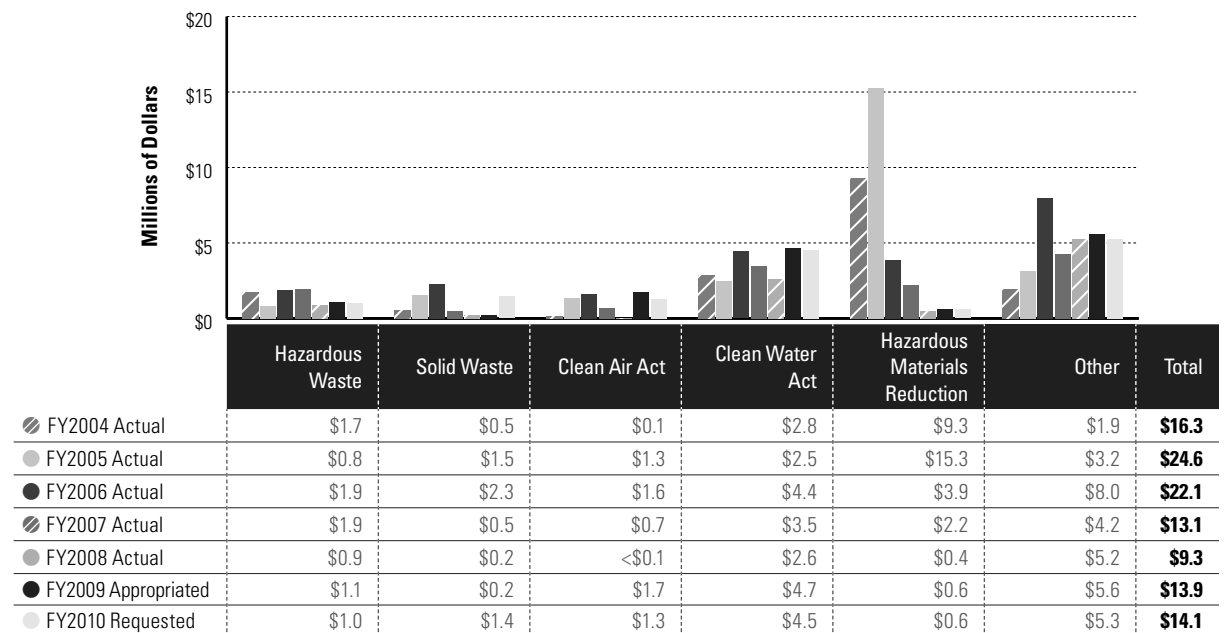


Figure V-7 Navy and Marine Corps Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

Air Force

The Air Force continues to emphasize pollution prevention as the preferred approach to achieving environmental compliance. Investments in the program have allowed the Air Force to exceed DoD's goals for solid waste diversion and hazardous waste reduction. The Air Force's Pollution Prevention Program includes funds to reduce health and safety risks at or near its installations.

As shown in Figure V-8, the Air Force invested \$59.4 million in pollution prevention activities. Of this total, the Air Force invested \$24.2 million in nonrecurring costs, \$22.5 million in recurring costs (other than Manpower and Education & Training), and \$12.7 million in Manpower and Education & Training costs. This represents an increase of approximately 14 percent in Air Force pollution prevention-related expenditures from FY2007. Air Force recurring and nonrecurring cost increases in FY2008 are primarily due to one-time projects.

In FY2008, the Air Force continued to fund nonrecurring pollution prevention efforts to save operating costs and meet E.O 13423 toxic chemical reduction goals, as illustrated in Figure V-9. Increases in nonrecurring costs beginning in FY2008 are associated with addressing hazardous waste and hazardous materials reductions, the identification and correction of connection deficiencies between stormwater and sanitary sewer systems associated with National Pollutant Discharge Elimination System (NPDES) permits, and executing one-time projects. Nonrecurring costs are projected to decrease significantly in FY2010, as the Air Force meets DoD's pollution prevention goals.

Figure V-8 Air Force Pollution Prevention Recurring and Nonrecurring Costs[†]

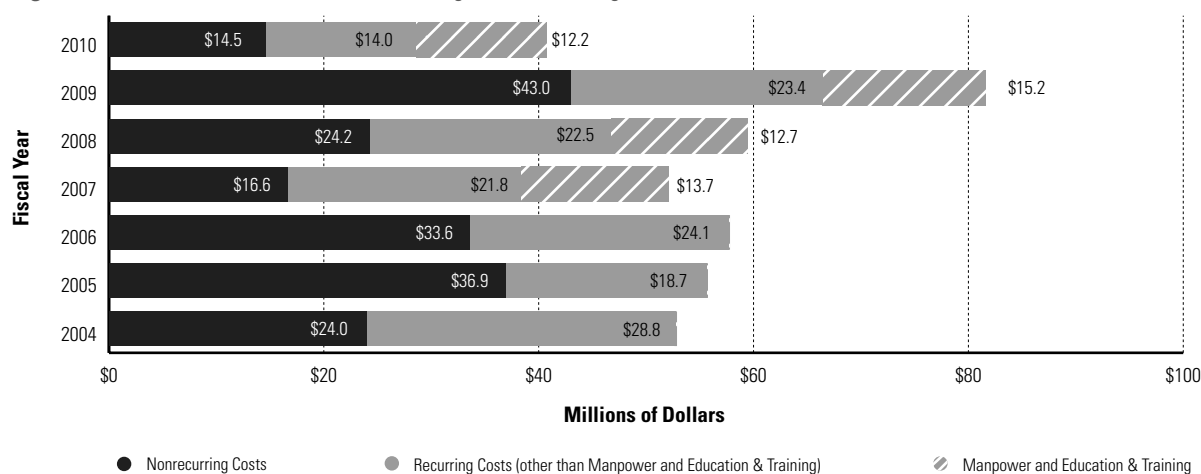
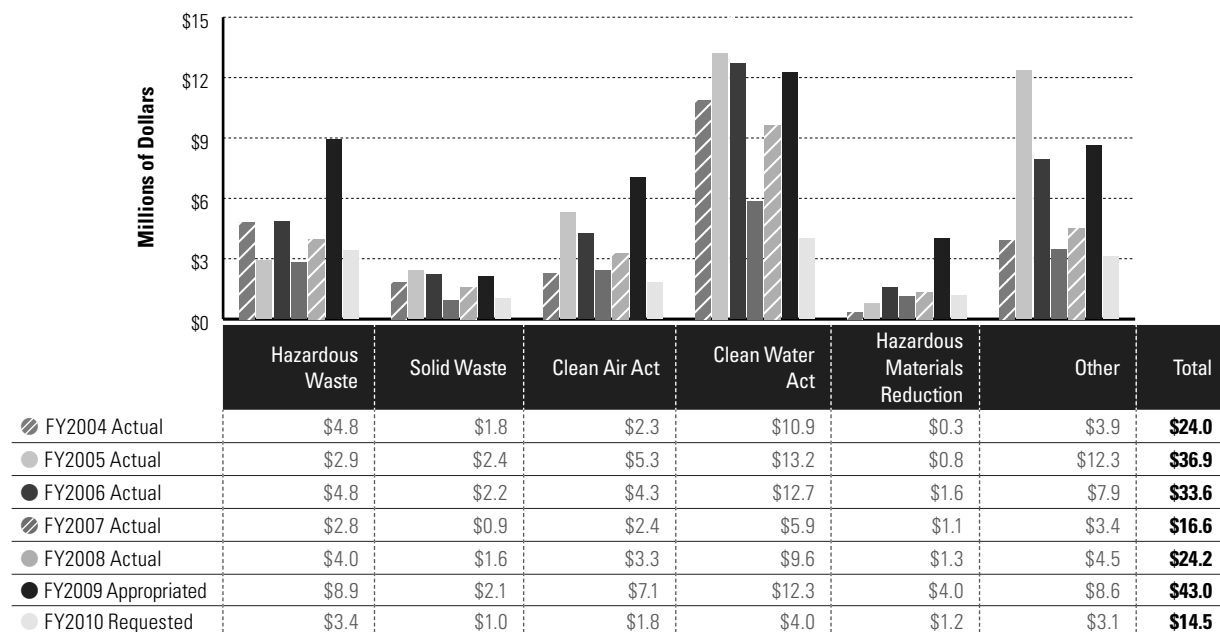


Figure V-9 Air Force Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

DLA

The Defense Logistics Agency (DLA) emphasizes reducing and preventing pollution through conservation of resources, replacement of hazardous materials with less hazardous materials, waste reduction, and recycling. Through pollution prevention activities, such as purchasing green products, attention to waste reduction goals, public outreach programs, and innovative technologies, DLA is able to use pollution prevention initiatives to reduce health and safety risks to personnel and nearby communities, and decrease conservation, restoration, and compliance costs.

As shown in Figure V-10, DLA invested \$891.0 thousand in pollution prevention activities. Of this total, DLA invested \$502.0 thousand in nonrecurring activities and \$389.0 thousand in recurring costs (other than Manpower and Education & Training). This represents a decrease of approximately 92 percent in DLA pollution prevention-related expenditures from FY2007. DLA's recurring costs (other than Manpower and Education & Training) continue to remain low due to its small military installations, which require limited resources.

DLA's nonrecurring costs totaled \$502.0 thousand in FY2008. As depicted in Figure V-11, DLA's primary pollution prevention efforts focused on Solid Waste, CWA, and Other nonrecurring activities. Funding increases in FY2009 nonrecurring costs are due to one time CWA projects. Hazardous Materials Reduction nonrecurring costs have decreased since FY2005 because of the drawdown of National Defense Stockpile initiatives.

Figure V-10 DLA Pollution Prevention Recurring and Nonrecurring Costs**

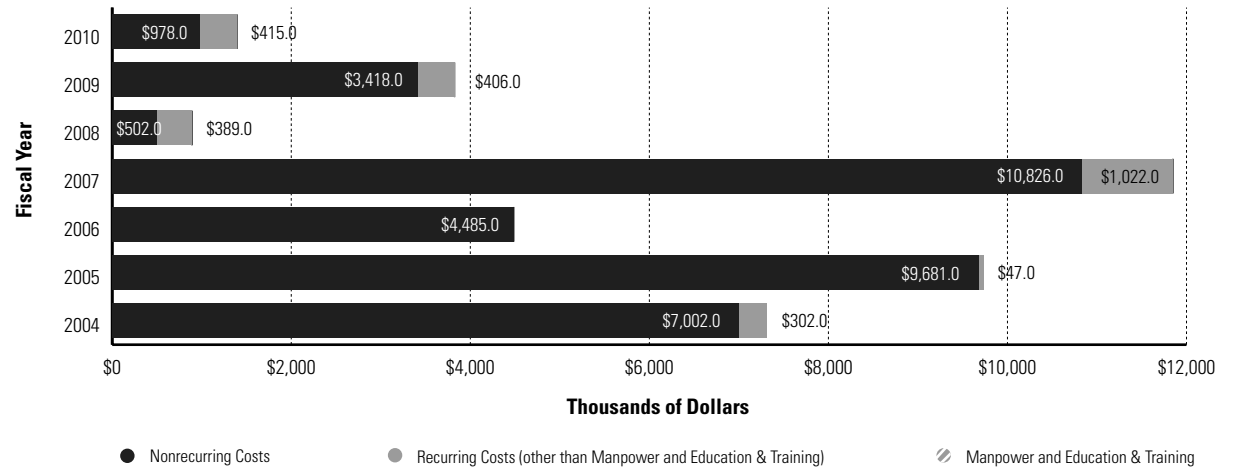
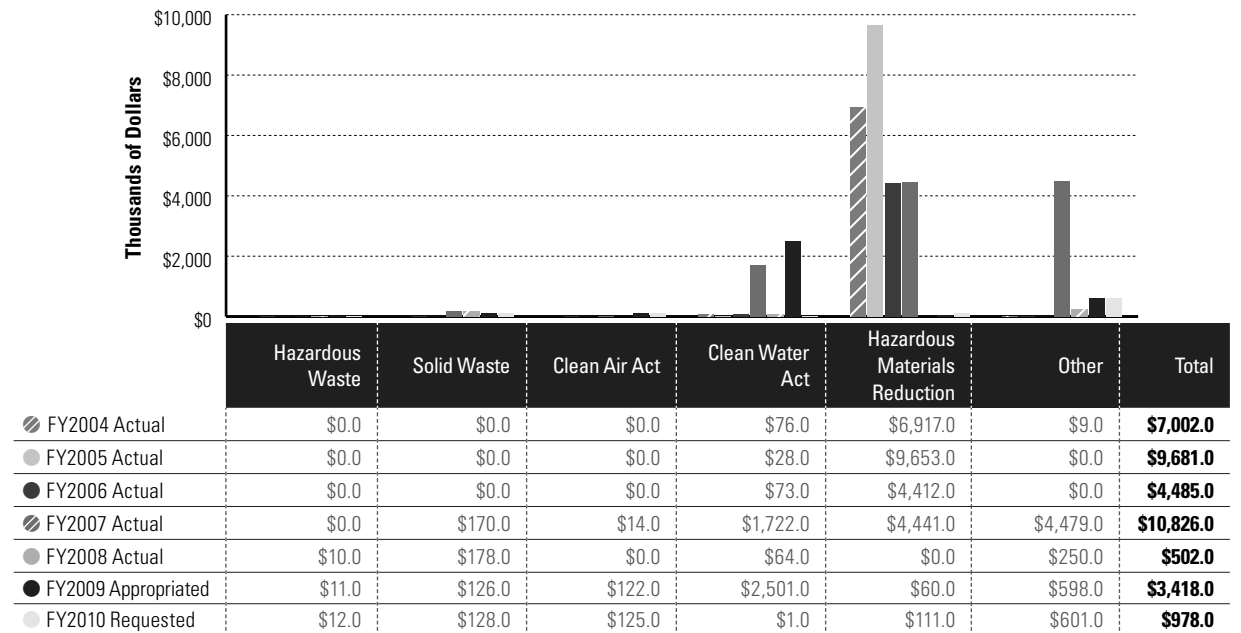


Figure V-11 DLA Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.

Other Defense-Wide Programs

Other Defense-wide programs include the Under Secretary of Defense for Acquisition, Technology, and Logistics; the Missile Defense Agency; the Defense Health Program, and other small agencies. As illustrated in Figure V-12, DoD obligated \$2.2 million to other Defense-wide programs in FY2008. Of this total, \$245.0 thousand was obligated for nonrecurring efforts and \$1.9 million was obligated for recurring efforts (other than Manpower and Education & Training).

Figure V-13 shows pollution prevention nonrecurring costs from FY2004 through FY2010. Overall expenditures for Other Defense-wide pollution prevention nonrecurring activities decreased by approximately \$496 thousand between FY2007 and FY2008. Hazardous Waste, Solid Waste, and Other nonrecurring activities received the largest proportion of nonrecurring cost funding in FY2008. Notable increases in funding across all Pollution Prevention nonrecurring activities are projected between FY2009 and FY2010. The increase in recurring costs beginning in FY2008 reflects the OSD initiative to address emerging contaminants. Increased attention to the Defense Health Program accounts for the increase in non-recurring costs beginning in FY2009.

Figure V-12 Other Defense-Wide Programs Pollution Prevention Recurring and Nonrecurring Costs**

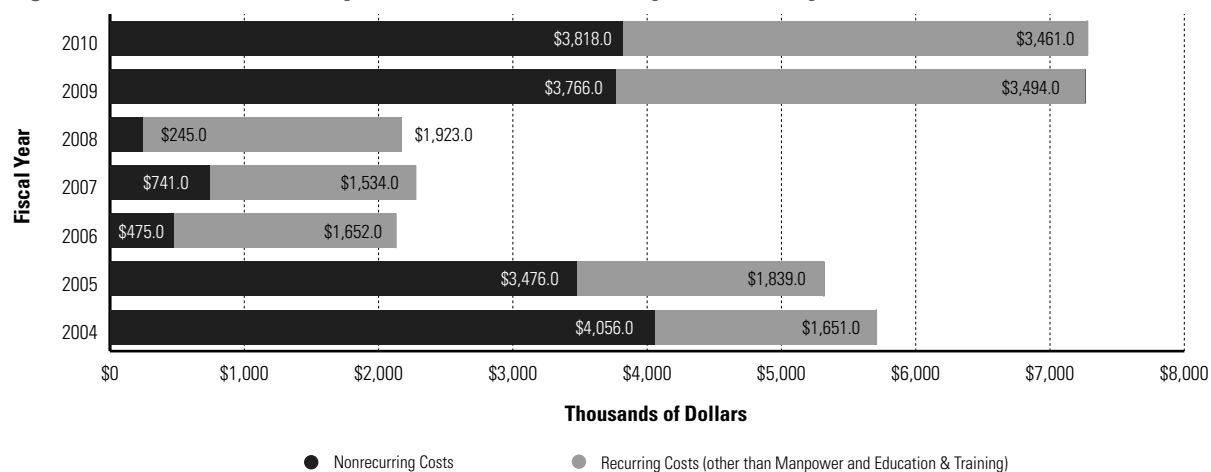
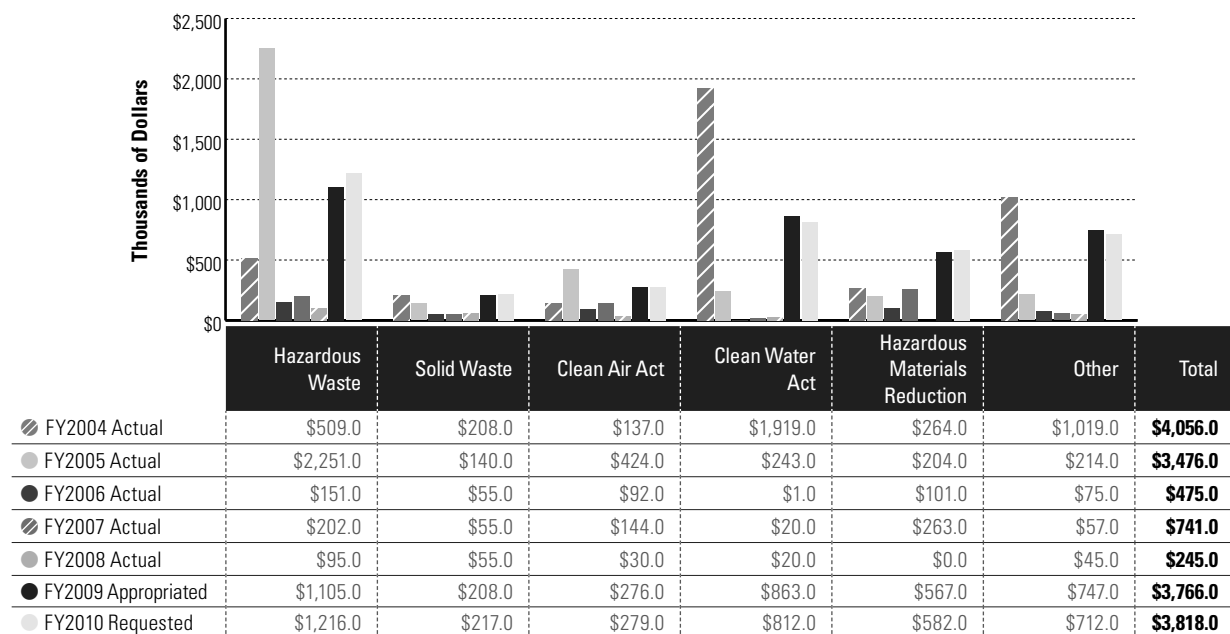


Figure V-13 Other Defense-Wide Programs Pollution Prevention Nonrecurring Costs*



* Due to rounding, subtotals may not equal fiscal year totals.

† Beginning in FY2007, recurring costs include Manpower and Education & Training.