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**OSD RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)**

Date: February 2006

APPROPRIATION/ BUDGET ACTIVITY  
RDT&E/ Defense Wide BA# 4

PE NUMBER AND TITLE

**0603851D8Z - Environmental Security Technology Certification Program (ESTCP)**

Cost (\$ in Millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total Program Element (PE) Cost	41.325	36.442	28.841	34.239	33.774	34.246	34.895
P514 Environmental Security Technology Certification Program (ESTCP)	41.325	36.442	28.841	34.239	33.774	34.246	34.895

**A. Mission Description and Budget Item Justification:** (U) This program demonstrates and validates the most promising innovative environmental technologies that target DoD's most urgent environmental needs. Technologies selected are projected to provide pay back of the investment within five years through cost savings and improved efficiencies. The program responds to: (1) congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration and waste management. Preference for demonstrations are given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD environmental requirements.

<b>B. Program Change Summary</b>	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2006)	42.046	30.632	28.392
Current BES/President's Budget (FY 2007)	41.325	36.442	28.841
Total Adjustments	-0.721	5.810	0.449
Congressional Program Reductions		0.244	
Congressional Rescissions		0.369	
Congressional Increases	-1.000	6.400	
Reprogrammings	5.500		
SBIR/STTR Transfer	5.000	0.456	
Other	-10.221	-1.659	0.449

(U) This program demonstrates and validates the most promising innovative environmental technologies that target DoD's most urgent environmental needs. Technologies selected are projected to provide pay back of the investment within five years through cost savings and improved efficiencies. The program responds to: (1) congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration and waste management. Preference for demonstrations are given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD environmental requirements.

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**C. Other Program Funding Summary:** Not Applicable.**D. Acquisition Strategy** ESTCP solicits proposals from all DoD organizations, other Federal Agencies, and the commercial sector as well. Projects are selected based on an annual competitive process through reviews conducted by multi-agency review panels.**E. Performance Metrics:**

FY	Strategic Goals Supported	Existing Baseline	Planned Performance Improvement / Requirement Goal	Actual Performance Improvement	Planned Performance Metric / Methods of Measurement	Actual Performance Metric / Methods of Measurement
	DoD Environmental Requirements					

Comment: Performance in this program is monitored at two levels. At the lowest level, each individual project is measured against technical and financial milestones on a quaterly and annual basis. At a program-wide level, progress is measured against DoD's environmental requirements and the demonstration and transition of technologies that address these requirements.

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**OSD RDT&E COST ANALYSIS (R3)**

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**0603851D8Z - Environmental Security Technology Certification  
Program (ESTCP)**

PROJECT

**0603851D8Z**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Demonstration and Validation			32365	38225		33642		26641		0	0	0
Overhead			2100	3100		2800		2200		0	0	0
Subtotal:			34465	41325		36442		28841		0	0	0

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0									

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0									

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0									

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**OSD RDT&E COST ANALYSIS (R3)**

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PROJECT

**0603851D8Z****Project Total Cost:****34465****41325****36442****28841****0****0****0**

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**OSD RDT&E PROJECT JUSTIFICATION (R2a Exhibit)**

Date: February 2006

APPROPRIATION/ BUDGET ACTIVITY  
RDT&E/ Defense Wide BA# 4

PE NUMBER AND TITLE

**0603851D8Z - Environmental Security Technology Certification  
Program (ESTCP)**PROJECT  
**P514**

Cost (\$ in Millions)		FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
P514	Environmental Security Technology Certification Program (ESTCP)	41.325	36.442	28.841	34.239	33.774	34.246	34.895

**A. Mission Description and Project Justification:** (U) This program demonstrates and validates the most promising innovative environmental technologies that target DoD's most urgent environmental needs. Technologies selected are projected to provide pay back of the investment within five years through cost savings and improved efficiencies. The program responds to: (1) congressional concern over the slow pace of remediation of environmentally polluted sites on military installations, (2) congressional direction to conduct demonstrations specifically focused on emerging new technologies, and (3) the need to improve defense readiness by reducing the drain on the Department's operation and maintenance dollars caused by environmental restoration and waste management. Preference for demonstrations are given to technologies that have successfully completed all necessary research and development objectives, and address the highest priority DoD environmental requirements.

**B. Accomplishments/Planned Program:**

Accomplishment/Planned Program Title	FY 2005	FY 2006	FY 2007
ESTCP:	41.325	0.000	0.000

(U) FY 2005 Accomplishments

- Reviewed and selected 40 technologies for demonstration.
- Reviewed and selected sites for demonstration of technologies.
- Prepared site-specific implementation plans.
- Prepared sites and secured regulatory permitting.
- Continued to demonstrate and evaluate 77 selected technologies. Of these, 27 were completed.

By Thrust:

- Environmental Restoration: Successfully demonstrated and validated technologies in multiple high priority areas related to cleanup of contaminated DoD sites. ESTCP has completed the successful demonstration of new cost-effective bioremediation technologies for chlorinated solvents and perchlorate, including seven projects that directly responded to congressional direction. Evaluations continued on site characterization technologies, dense nonaqueous phase liquid (DNAPL) source treatments technologies, additional perchlorate treatment approaches, and in-situ treatment for RDX and TNT. These technologies are projected to reduce future DoD liability by \$100s of millions. (\$14.905 million)

- Munitions Management: ESTCP researchers continued to demonstrate improved UXO detection hardware and software technologies at the DoD UXO standardized test sites and to provide standardized statistical analyses of demonstrations at these sites. Continued demonstration of a UXO detection and characterization system in a marine environment, an approach to characterize areas with UXO based on statistical methods, and a multi-sensor cart based system to detect and characterize UXO. Initiated a variety of enhanced discrimination technology demonstrations and electromagnetic induction technology demonstrations. Executed Congressionally directed wide area assessment pilot program. (\$13.510 million)

- Weapons Systems and Platforms: ESTCP continued to validate and transition environmentally benign technologies that directly impact military weapons systems and platforms. Demonstrations continued on

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environmentally friendly alternatives for hard chrome plating and cadmium replacements for a wide variety of weapon systems and components, new coatings removal systems, shipboard wastewater and emissions systems, and the effects of biofuels on reducing particulate emissions from diesel engines. (\$9.800 million)

- Sustainable Infrastructure: Significant progress was made in the development of environmental monitoring technologies required by DoD to ensure DoD facilities and ranges are in compliance. Demonstrations continued to reduce soil erosion, dust generation, and storm water runoff on testing and training ranges. Demonstrations on reducing impacts of military operation around the runway environment were completed. (\$3.110 million)

Accomplishment/Planned Program Title	FY 2005	FY 2006	FY 2007
ESTCP:	0.000	36.442	0.000

FY 2006 Plans: FY 2006 funds will be invested in projects that address priority DoD environmental requirements. The focus of the program is on UXO detection, discrimination, data standardization, and cleanup; range and installation sustainment; and eliminating/reducing waste streams associated with DoD weapon systems. Funds are primarily required to continue ongoing investments.

- Continue 69 demonstration projects
- Reviewed and selected 30 new technologies for demonstration.
- Review and select sites for demonstration of technologies.
- Prepare site-specific implementation plans
- Prepare sites and secure regulatory permitting
- Award demonstration testing and evaluation for selected technologies.

By Thrust:

- Environmental Restoration: (\$10.663 million)
- Munitions Management: (\$14.053 million)
- Weapons Systems and Platforms: (\$8.463 million)
- Sustainable Infrastructure: (\$3.263 million)

Accomplishment/Planned Program Title	FY 2005	FY 2006	FY 2007
ESTCP:	0.000	0.000	28.841

FY 2007 Plans: The FY 2007 funds are planned for investment in projects that address priority DoD environmental requirements. The focus of the program is on UXO detection and cleanup, range and installation sustainment and eliminating/reducing waste streams associated DoD weapon systems. Funds are primarily required to continue ongoing investments.

- Review and select technologies for demonstration.
- Review and select sites for demonstration of technologies.
- Prepare site-specific implementation plans
- Prepare sites and secure regulatory permitting
- Award demonstration testing and evaluation for selected technologies.

By Pillar:

- Environmental Restoration: (\$9.961 million)
- Munitions Management: (\$7.590 million)

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- Weapons Systems and Platforms: (\$7.850 million)
- Sustainable Infrastructure: (\$3.440 million)

**C. Other Program Funding Summary:** Not Applicable.

**D. Acquisition Strategy** Acquisition Strategy: ESTCP solicits proposals from all DoD organizations and competes them with a multi-agency review panel. ESTCP solicits proposals from other Federal Agencies and the commercial sector as well. These are also competed using review panels.

**E. Major Performers** Not Applicable.

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