

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2005

BUDGET ACTIVITY

4 - Advanced Component Development and Prototypes

PE NUMBER AND TITLE

0603□□□A - Environmental Quality Technology Dem/Val

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	38576	41651	5166	5088	5093	5093	5090	5087	Continuing	Continuing
035 NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE	4702	4610	4987	5088	5093	5093	5090	5087	Continuing	Continuing
04E ENVIRONMENTAL RESTORATION TECH VALIDATION	5017	3089	0	0	0	0	0	0	0	15052
04I TECHNOLOGIES TO REDUCE NON- HAZARDOUS WASTE	939	2109	0	0	0	0	0	0	0	2613
04J ENVIRONMENTAL COMPLIANCE TECHNOLOGY VALIDATION	1207	1263	179	0	0	0	0	0	0	2967
04K WASTE MINIMIZATION AND POLLUTION PREVENTION	1315	958	0	0	0	0	0	0	0	3104
E12 TRANSPORTABLE DETONATION CHAMBER VALIDATION	4507	4027	0	0	0	0	0	0	0	13874
E14 ENVIRONMENTAL SECURITY INITIATIVE (CA)	3192	0	0	0	0	0	0	0	0	3362
E15 ARSENIC REMOVAL (CA)	1596	1917	0	0	0	0	0	0	0	1681
E16 ABERDEEN PG ASBESTOS CONVERSION FACILITY (CA)	1315	1150	0	0	0	0	0	0	0	1385
E17 ARMY ENVIRONMENTAL SOLUTIONS PROGRAM (CA)	2348	2397	0	0	0	0	0	0	0	2473
E19 SUSTAINABLE INSTALLATIONS INITIATIVE (CA)	939	1629	0	0	0	0	0	0	0	989
E22 ENVIRONMENTAL MANAGEMENT SYSTEM DEMONSTRATION	0	958	0	0	0	0	0	0	0	958
E23 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PILOT IN DOD	0	1438	0	0	0	0	0	0	0	1438
E24 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PRG	0	958	0	0	0	0	0	0	0	958

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E28	WELLHEAD TREATM'T OF PERCHLORATE CONTAMINATED WELL	0	2397	0	0	0	0	0	0	0	2397
E34	NDCEE JOINT SERVICES INITIATIVE	0	6519	0	0	0	0	0	0	0	6519
EN1	CASTING EMISSION REDUCTION PROGRAM (CERP)	3755	3356	0	0	0	0	0	0	0	15415
EN3	MANAGING ARMY TECHNOLOGY ENVIRON ENHANCEMENTS	2956	0	0	0	0	0	0	0	0	5033
EN6	UNEXPLODED ORDNANCE IN SUPPORT OF MILITARY READ	4788	0	0	0	0	0	0	0	0	12367
EN7	VANADIUM TECHNOLOGY PROGRAM	0	2876	0	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification: There is a broad application potential for environmental quality technology (EQT) to be applied to multiple Army weapon systems and installations. However, technology must be validated (total ownership cost and performance data identified) before potential users will consider exploiting it. Therefore, this program element includes projects focused on validating the general military utility or cost reduction potential of technology when applied to different types of military equipment or techniques. It may include validations and proof-of-principle demonstrations in field exercises to evaluate upgrades or provide new operational capabilities. The validation of technologies will be in as realistic an operating environment as possible to assess performance or cost reduction potential. EQT demonstration/validation is systemic; i.e., applies to a class of systems (e.g., tanks or aircraft) or to a Department of Army-wide, multiple site/installation problem (e.g., unexploded ordnance detection and discrimination). This program will address, and eventually resource, programs in each of the environmental quality technology pillars (restoration, conservation, compliance, and pollution prevention). Work must be endorsed by potential users and supported by a state-of-the-art assessment (i.e., technology is well-in-hand).

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<u>B. Program Change Summary</u>	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	9356	9050	8839
Current Budget (FY 2006/2007 PB)	41651	5166	5088
Total Adjustments	32295	-3884	-3751
Net of Program/Database Changes			
Congressional Program Reductions	-611		
Congressional Rescissions			
Congressional Increases	34100		
Reprogrammings			
SBIR/STTR Transfer	-1194		
Adjustments to Budget Years		-3884	-3751

Change Summary Explanation:**Funding:**

FY 2005 - There were fourteen Congressionally added projects (\$34,100K) in FY05: Technologies to Reduce Non-Hazardous Solid Waste; Waste Minimization and Pollution Prevention; Transportable Detonation Chamber Validation; Arsenic Removal; Aberdeen Proving Ground (APG) Asbestos Conversion Facility; Army Environmental Solutions Program; Sustainable Installations Initiative; Environmental Management System Demonstration; Environmental Management System Pilot to DoD; Environmental Security Technical Certificate; Wellhead Treatment of Perchlorate Contamination of Wells; National Defense Center for Environmental Excellence (NDCEE) Joint Services Initiative; Casting Emission Reduction Program (CERP); and Vanadium Technology Program.

FY 2006 - Funds realigned (\$3,884K) to higher priority requirements.

FY 2007 - Funds realigned (\$3,751K) to higher priority requirements.

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PROJECT

035

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
035 NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE	4702	4610	4987	5088	5093	5093	5090	5087	Continuing	Continuing

A. Mission Description and Budget Item Justification: The National Defense Center for Environmental Excellence (NDCEE) was established by Congress in 1990 with a directive to "serve as a national leadership organization to address high priority environmental problems for the Department of Defense (DoD), other government organizations, and the industrial community." The NDCEE Program is a national resource for developing and disseminating advanced environmental technologies. The NDCEE is used to demonstrate environmentally acceptable technology to industry; validate new technology prior to transferring that technology; and assist in the training of potential users as part of that technology transfer process. The NDCEE is a DoD resource for environmental quality management and technology validation. This program is managed by the Army on behalf of the Office of the Assistant Deputy Under Secretary of Defense for Environment (ADUSD-E).

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
Management and operations of the NDCEE by the prime contractor.	1100	1200	1200	1200
Industrial base integration, operation of the NDCEE environmental technology facility, and environmental information analysis.	500	400	500	500
Conduct demonstration/validation of environmentally acceptable technologies that enhance military readiness and reduce production, operating, and/or disposal costs.	2702	2610	2887	2988
NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.	400	400	400	400
Totals	4702	4610	4987	5088

B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: The NDCEE is a national asset focused on DoD applications that include technology transfer to appropriate

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<p>DoD organizations. The NDCEE fosters an outreach program to describe its products and capabilities that includes publication of task results and participation in professional meetings, symposia, conferences, and coordination with industry as much as reasonable. The management strategy for the NDCEE centers on a DoD Executive Advisory Board (EAB) chaired by the DoD NDCEE Executive Agent on behalf of the ADUSD-E and composed of senior DoD leadership to direct and oversee NDCEE operations. The EAB is supported by an EAB Working Group (EABWG) that includes staff members from each of the offices represented on the EAB. The EABWG coordinates all NDCEE activities and reports back to the EAB Principals. The EABWG is, in turn, supported by a Technical Working Group (TWG) that addresses the details of NDCEE program execution. The contracting strategy of the NDCEE is based on using an NDCEE Contracting Officer's Representative to validate all the contractual portions of the NDCEE and by technical monitors (TM) to oversee the technical aspects of each contracted task. TMs serve on the TWG. An NDCEE prime contractor operates an NDCEE test facility(s) to validate environmentally compatible technologies on a representative "shop floor". The NDCEE accounts for and conducts work for: (1) direct funded Army tasks; (2) reimbursable tasks from within DoD and from other Government agencies; and (3) Congressionally directed and funded tasks.</p>		

ARMY RDT&E COST ANALYSIS(R3)										February 2005		
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT		
4 - Advanced Component Development and Prototypes					0603□□□A - Environmental Quality Technology Dem/Val					035		
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
a . Not applicable.			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
II. Support Cost	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
a . Technical Data	C; CPFF	Concurrent Technologies Corporation (CTC), Johnstown, PA	3500	1600	2Q	1700	2Q	1700	2Q	Continue	Continue	Continue
Subtotal:			3500	1600		1700		1700		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
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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
a . Development Testing	C; CPFF	Concurrent Technologies Corp.	2466	0		0		0		0	2466	2466
b . Development Testing	C; CPFF	Concurrent Technologies Corp.	5619	2610	2Q	2887	2Q	2988	2Q	Continue	Continue	Continue
Subtotal:			8085	2610		2887		2988		Continue	Continue	Continue
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
a . Program Management Support	Allotment	Office of the Assistant Sec Army (Installations and Environment)	2387	400	2Q	400	2Q	400	2Q	Continue	Continue	Continue
Subtotal:			2387	400		400		400		Continue	Continue	Continue
Project Total Cost:			13972	4610		4987		5088		Continue	Continue	Continue

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BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603□□□A - Environmental Quality Technology Dem/Val				PROJECT E22		
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
E22 ENVIRONMENTAL MANAGEMENT SYSTEM DEMONSTRATION	0	958	0	0	0	0	0	0	0	958
<p><u>A. Mission Description and Budget Item Justification:</u> The Environmental Management System Demonstration is a new Congressional interest project. The project involves pilot projects, in which Army installations will install internet-based environmental management systems.</p>										
<u>Accomplishments/Planned Program</u>							FY 2004	FY 2005	FY 2006	FY 2007
Installation of internet-based environmental management systems for purposes of demonstration and validation.							0	958	0	0
Totals							0	958	0	0
<p><u>B. Other Program Funding Summary:</u> Not applicable for this item.</p>										
<p><u>C. Acquisition Strategy:</u> Not applicable for this item.</p>										

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PROJECT

E23

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
E23 ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PILOT IN DOD	0	1438	0	0	0	0	0	0	0	1438

A. Mission Description and Budget Item Justification: The Environmental Management System (EMS) Pilot in Department of Defense (DOD) is a new Congressional interest project. The project is to demonstrate and validate EMS internet-based software applications at Defense sites in order to better manage environmental information and reduce compliance burdens of installations.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
To demonstrate and validate EMS internet-based software applications at Defense sites.	0	1438	0	0
Totals	0	1438	0	0

B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: Not applicable for this item.

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BUDGET ACTIVITY 4 - Advanced Component Development and Prototypes				PE NUMBER AND TITLE 0603□□□A - Environmental Quality Technology Dem/Val				PROJECT E24		
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
E24 ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PRG	0	958	0	0	0	0	0	0	0	958
<p><u>A. Mission Description and Budget Item Justification:</u> The Environmental Security Technical Certification Program is a new Congressional interest project. This project is only for a demonstration of remediation technologies in the eastern portion of the Bunker Hill Basin served by the East Valley Water District in San Bernardino, California.</p>										
<u>Accomplishments/Planned Program</u>							FY 2004	FY 2005	FY 2006	FY 2007
To demonstrate remediation technologies in the eastern portion of the Bunker Hill Basin served by the East Valley Water District.							0	958	0	0
Totals							0	958	0	0
<p><u>B. Other Program Funding Summary:</u> Not applicable for this item.</p>										
<p><u>C. Acquisition Strategy:</u> Not applicable for this item.</p>										

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PROJECT

E2□

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
E28 WELLHEAD TREATM'T OF PERCHLORATE CONTAMINATED WELL	0	2397	0	0	0	0	0	0	0	2397

A. Mission Description and Budget Item Justification: The Wellhead Treatment of Perchlorate Contaminated Well is a new Congressional interest project. It is to demonstrate enhancements to existing, best available technologies, as well as new and cost-effective technologies to remediate the perchlorate-contaminated public drinking water supplies in the Rialto, Fontana, and Colton (California) areas.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
To demonstrate enhancements to existing, best available technologies (as well as new and cost-effective technologies) to remediate the perchlorate-contaminated public drinking water supplies in Rialto, Fontana, and Colton (California) areas.	0	2397	0	0
Totals	0	2397	0	0

B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: Not applicable for this item.

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PROJECT

E34

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
E34 NDCEE JOINT SERVICES INITIATIVE	0	6519	0	0	0	0	0	0	0	6519

A. Mission Description and Budget Item Justification: The National Defense Center for Environmental Excellence (NDCEE) Joint Services Initiative is a new Congressional interest project. The project is to address joint service environmental requirements, identify technological solutions, and perform technology management and demonstration/validation to permit widespread technology adoption.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
To address joint service environmental requirements, identify technological solutions and perform technology management and demonstration/validation to permit widespread technology adoption.	0	6519	0	0
Totals	0	6519	0	0

B. Other Program Funding Summary: Not applicable for this item.

C. Acquisition Strategy: Not applicable for this item.