ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE
4 - Advanced Component Development and Prototypes	**0603779A - Environmental Quality Technology Dem/Val**

	COST (In Thousands)	FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
	Total Program Element (PE) Cost	34252	24194	6149	5389	4848	4841	4947	5056	Continuing	Continuing
035	NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE	4752	5108	4860	4859	4848	4841	4947	5056	Continuing	Continuing
04I	TECHNOLOGIES TO REDUCE NON-HAZARDOUS WASTE	2492									4600
04J	ENVIRONMENTAL COMPLIANCE TECHNOLOGY VALIDATION	171									1433
E12	TRANSPORTABLE DETONATION CHAMBER VALIDATION	3834									7859
E14	ENVIRONMENTAL SECURITY INITIATIVE (CA)	959									959
E15	ARSENIC REMOVAL (CA)		1582								3498
E16	ABERDEEN PG ASBESTOS CONVERSION FACILITY (CA)	1342									2491
E17	ARMY ENVIRONMENTAL SOLUTIONS PROGRAM (CA)		989								3385
E19	SUSTAINABLE INSTALLATIONS INITIATIVE (CA)	2013	2126								5768
E21	POLLUTION PREVENTION TECHNOLOGY DEM/VAL			1289	530						1819
E23	ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PILOT IN DOD	1916									3353
EN1	CASTING EMISSION REDUCTION PROGRAM (CERP)	4217									7571
EN4	PLASMA ENERGY PYROLYSIS SYSTEM (PEPS)	1342	989								2331
EN7	VANADIUM TECHNOLOGY PROGRAM	1438	1335								5648
EP1	ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)	9776	12065								21841

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 infrastructure, 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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B. Program Change Summary	FY 2006	FY 2007	FY 2008	FY 2009
Previous President's Budget (FY 2007)	35255	5166	5171	5174
Current BES/President's Budget (FY 2008/2009)	34252	24194	6149	5389
Total Adjustments	-1003	19028	978	215
Congressional Program Reductions		-92		
Congressional Rescissions	-1003			
Congressional Increases		19300		
Reprogrammings		-180		
SBIR/STTR Transfer				
Adjustments to Budget Years			978	215

Change Summary Explanation:
FY 2007 - There were 11 congressional interest projects ($19,300,000) added (Vanadium Technology Program, Arsenic Removal, Plasma Energy Pyrolysis System, Regional Sustainability Solutions, Western Hemisphere Information Exchange Program, and Environmental Quality Technology Demonstration/Validation Adds (which includes the Strategic Biofuel Supply Program, Biowaste to Bioenergy, Mission Critical Environment, Safety and Occupational Health (ESOH) Technology Transition, Biodiesel Plastic Recycling for Reduction of Battlefield Clutter, No Rinse Decontamination of Battlefield Equipment, and HI Undersea Chemical Weapons Assessment Program).

FY 2008 - Adjustments are due to funds realigned to higher priority requirements, and to support the Sustainable Painting Operations for the Total Army (SPOTA) project, which addresses the Army Environmental Quality Technology highest priority requirement for Pollution Prevention.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
4 - Advanced Component Development and Prototypes	**0603779A - Environmental Quality Technology Dem/Val**	**035**

COST (In Thousands)		FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
035	NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE	4752	5108	4860	4859	4848	4841	4947	5056	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 2006	FY 2007	FY 2008	FY 2009
Management and operations of the NDCEE by the prime contractor.	1800	2050	2112	2175
Industrial base integration, operation of the NDCEE environmental technology facility, and environmental information analysis.	500	500	500	500
Conduct demonstration/validation of environmentally acceptable technologies that enhance military readiness and reduce production, operating, and/or disposal costs.	2244	2187	1998	1909
NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.	208	228	250	275
Small Business Innovative Research/Small Business Technology Transfer Programs		143		
Total	4752	5108	4860	4859

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 DoD organizations. The NDCEE fosters an outreach program to describe its products and capabilities that include publication of results and participation in professional meetings, symposia, conferences, and appropriate coordination with industry. 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 (ESOH) and composed of senior DoD leadership to 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. A prime contractor operates 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.

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY
4 - Advanced Component Development and Prototypes

PE NUMBER AND TITLE
0603779A - Environmental Quality Technology Dem/Val

PROJECT
035

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Not applicable.														
Subtotal:														

II. Support Costs	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Technical Data	C; CPFF	Concurrent Technologies Corporation (CTC), Johnstown, PA	5100	2300	2Q	2550	2Q	2612	2Q	2675	2Q	Cont.	Cont.	Cont.
Subtotal:			5100	2300		2550		2612		2675		Cont.	Cont.	Cont.

III. Test And Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Development Testing	C; CPFF	Concurrent Technologies Corp.	2466										2466	2466
Development Testing	C; CPFF	Concurrent Technologies Corp.	8227	2244	2Q	2330	2Q	1998	2Q	1909	2Q	Cont.	Cont.	Cont.
Subtotal:			10693	2244		2330		1998		1909		Cont.	Cont.	Cont.

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	FY 2008 Cost	FY 2008 Award Date	FY 2009 Cost	FY 2009 Award Date	Cost To Complete	Total Cost	Target Value of Contract

ARMY RDT&E COST ANALYSIS (R3)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
4 - Advanced Component Development and Prototypes	**0603779A - Environmental Quality Technology Dem/Val**	**035**

Program Management Support	Allotment	Office of the Assistant Sec Army (Installations and Environment)	2787	208	4Q	228	4Q	250	4Q	275	4Q	Cont.	Cont.	Cont.
Subtotal:			2787	208		228		250		275		Cont.	Cont.	Cont.
Project Total Cost:			**18580**	**4752**		**5108**		**4860**		**4859**		**Cont.**	**Cont.**	**Cont.**

Schedule Detail (R4a Exhibit)		February 2007
BUDGET ACTIVITY **4 - Advanced Component Development and Prototypes**	PE NUMBER AND TITLE **0603779A - Environmental Quality Technology Dem/Val**	PROJECT **035**

Schedule Detail: Not applicable for this item.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2007

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
4 - Advanced Component Development and Prototypes	**0603779A - Environmental Quality Technology Dem/Val**	**E21**

COST (In Thousands)		FY 2006 Actual	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	FY 2012 Estimate	FY 2013 Estimate	Cost to Complete	Total Cost
E21	POLLUTION PREVENTION TECHNOLOGY DEM/VAL			1289	530						1819

A. Mission Description and Budget Item Justification: This project supports Advanced Component Development and Prototypes of reformulated surface coating materials for weapon systems production and maintenance operations. These materials will increase operational sustainment and warfighter training capabilities by reducing soldier health risks, environmental impacts and compliance enforcement actions against installations while increasing coatings performance and standardization across the Army. Together with project 0603804A, Logistics and Engineer Equipment _ Adv Dev (K42), this project transitions advanced technologies developed under 0603728A, Environmental Quality Technology Demonstrations (025). The project tests and evaluates Sustainable Painting Operations for the Total Army (SPOTA) at facilities that produce and maintain Combat Support/Combat Service Support systems, Ground Combat Vehicles and other Army equipment. The project expedites technology transition from the laboratory to operational use by demonstrating the capabilities of reformulated materials to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals and other technical data.

Accomplishments/Planned Program:	FY 2006	FY 2007	FY 2008	FY 2009
Qualify, validate and approve reformulated Chemical Agent Resistant Coating (CARC) systems and other non-CARC paints.			400	150
Qualify, validate and approve hazardous air pollutant (HAP) free solvents, thinners and cleaners.			350	150
Qualify, validate and approve chemical paint strippers containing no methylene chloride or other HAPs.			389	130
Qualify, validate and approve reformulated sealants and adhesives for high-use applications.			150	100
Total			1289	530

B. Other Program Funding Summary	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	To Compl	Total Cost
0603728A, Environmental Quality Technology Demonstrations (025)	2979	3433	3532	3645	3725	3799	3883	3968	29023	57987
0603804A, Logistics and Engineer Equipment _ Adv Dev (K42)			6182	5241	3020	480			14980	29903
0605857A, Environmental Quality Technology Mgmt Support (06I)			351	275	280	68			977	1951

Comment:

C. Acquisition Strategy To be determined.