Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603779A: Environmental Quality Technology - Dem/Val

DATE: February 2012

BA 4: Advanced Component Development & Prototypes (ACD&P)

•	•	• • •	,								
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	3.622	5.023	4.631	-	4.631	4.755	4.562	4.197	4.210	Continuing	Continuing
035: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE- NDCEE	3.622	4.591	4.232	-	4.232	4.324	4.562	3.880	3.899	Continuing	Continuing
04E: ENVIRONMENTAL RESTORATION TECH VALIDATION	-	0.432	0.399	-	0.399	0.431	-	0.317	0.311	Continuing	Continuing

Note

FY 2013 Funds \$.477M realigned to higher priority requirements.

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 demonstrated and 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 heading for user to implement").

PE 0603779A: Environmental Quality Technology - Dem/Val Army

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APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

2040: Research, Development, Test & Evaluation, Army

PE 0603779A: Environmental Quality Technology - Dem/Val

DATE: February 2012

BA 4: Advanced Component Development & Prototypes (ACD&P)

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Army

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	4.695	4.946	5.108	-	5.108
Current President's Budget	3.622	5.023	4.631	-	4.631
Total Adjustments	-1.073	0.077	-0.477	-	-0.477
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-0.905	-			
SBIR/STTR Transfer	-0.140	-			
 Adjustments to Budget Years 	-	-	-0.477	-	-0.477
Other Adjustments 1	-0.028	0.077	-	-	-

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army								DATE: February 2012			
2040: Research, Development, Test & Evaluation, Army				PE 0603779A: Environmental Quality 035:					PROJECT 35: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE		
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 FY 2013 CO Total FY 2014 FY 2015				FY 2016	FY 2017	Cost To Complete	Total Cost
035: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE- NDCEE	3.622	4.591	4.232	-	4.232	4.324	4.562	3.880	3.899	Continuing	Continuing
Quantity of RDT&E Articles											

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). In May 2008, the program name was redesignated from the National Defense for Environmental Excellence to the National Defense Center for Energy and Environment to ensure that the Center's mission recognizes and addresses the strategic interdependence of energy and environmental technology requirements within an overall sustainability framework in support of our installations, weapons systems and war fighters. This name change also directly supports the DoD's proactive implementation of Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management."

Our broadly encompassing and growing mobile, personal and stationary advanced energy technology requirements include infrastructure, alternative and synthetic fuels, surety, renewables, storage, distribution, advanced power, micro-grids, transportation, systems integration and others. Further, to train as we fight, validated energy and environmental technologies need to be available, and implemented at our power projection bases and training areas. The NDCEE will continue to research, demonstrate and transfer these technologies supporting our integrated Environment, Safety and Occupational Health (ESOH) and energy objectives with full consideration of the triple bottom line of mission, environment and community.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Management and operations of the NDCEE by the prime contractor.	1.325	1.300	1.468
Articles:	0	0	
Description: Management and operations of the NDCEE by the prime contractor.			
FY 2011 Accomplishments: Management and operations of the NDCEE by the prime contractor.			
FY 2012 Plans:			

PE 0603779A: Environmental Quality Technology - Dem/Val

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army			DATE: Fel	bruary 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJEC	Т		
2040: Research, Development, Test & Evaluation, Army	PE 0603779A: Environmental Quality Technology - Dem/Val		TONAL DEFE		FOR
BA 4: Advanced Component Development & Prototypes (ACD&P)	EXCELLENC	E-NDCEE			
B. Accomplishments/Planned Programs (\$ in Millions, Article Qu	uantities in Each)		FY 2011	FY 2012	FY 2013
Management and operations of the NDCEE by the prime contractor.					
FY 2013 Plans:					
Management and operations of the NDCEE by the prime contractor.					
Title: Industrial base integration, operation of the NDCEE environment	ntal technology facility, and environmental inform	ation	0.500	0.500	0.50
analysis.		Articles:	0	0	
Pagarintian, Industrial base integration, energtion of the NDCEE and	viranmental technology facility, and enviranment				
Description: Industrial base integration, operation of the NDCEE envanalysis.	vironmental technology facility, and environment	ai imormation			
FY 2011 Accomplishments:		a mah sala			
Industrial base integration, operation of the NDCEE environmental te	chhology facility, and environmental information	anaiysis.			
FY 2012 Plans:	about a surfacility and an incompanied information	an alvaia			
Industrial base integration, operation of the NDCEE environmental te	chhology facility, and environmental information	anaiysis.			
FY 2013 Plans:					
Industrial base integration, operation of the NDCEE environmental te		-	4.500	0.550	4.05
<i>Title:</i> Conduct demonstration/validation of environmentally acceptabl production, operating, and/or disposal costs.	le technologies that enhance military readiness a	na reauce	1.530	2.556	1.85
production, operating, and/or disposal costs.		Articles:			
Description: Conduct demonstration/validation of environmentally ad	ccentable technologies that enhance military rea				
reduce production, operating, and/or disposal costs.	occeptable teermologies that ermance mintary rea	anicoo ana			
FY 2011 Accomplishments:					
Conducted demonstration/validation of environmentally acceptable to	echnologies that enhance military readiness and	reduce			
production, operating, and/or disposal costs.					
FY 2012 Plans:					
Conduct demonstration/validation of environmentally acceptable tech production, operating, and/or disposal costs.	nnologies that enhance military readiness and red	duce			
FY 2013 Plans:					
		'	'	'	

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PE 0603779A: Environmental Quality Technology - Dem/Val Page 4 of 10 R-1 Line #63 Army

Exhibit R-2A, RDT&E Project Justification: PB 2013 Army	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
2040: Research, Development, Test & Evaluation, Army	PE 0603779A: Environmental Quality	035: NATIONAL DEFENSE CNTR FOR
BA 4: Advanced Component Development & Prototypes (ACD&P)	Technology - Dem/Val	ENVIRO EXCELLENCE-NDCEE

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Will conduct demonstration/validation of environmentally acceptable technologies that enhance military readiness and reduce production, operating, and/or disposal costs.			
Title: NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.	0.267 0	0.235 0	0.405
Articles:			
Description: NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.			
FY 2011 Accomplishments: NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.			
FY 2012 Plans: NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.			
FY 2013 Plans: NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer.			
Accomplishments/Planned Programs Subtotals	3.622	4.591	4.232

C. Other Program Funding Summary (\$ in Millions)

N/A

D. 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 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

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army	DATE: February 2012							
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT						
2040: Research, Development, Test & Evaluation, Army	PE 0603779A: Environmental Quality	035: NATIONAL DEFENSE CNTR FOR						
BA 4: Advanced Component Development & Prototypes (ACD&P)	Technology - Dem/Val	ENVIRO EXCELLENCE-NDCEE						
"shop floor". The NDCEE accounts for and conducts work for: (1) dir agencies; and (3) Congressionally directed and funded tasks.	rect funded Army tasks; (2) reimbursable tasks	from within DoD and from other Government						
E. Performance Metrics								
Performance metrics used in the preparation of this justification mate	erial may be found in the FY 2010 Army Perform	mance Budget Justification Book, dated May 2010.						

PE 0603779A: Environmental Quality Technology - Dem/Val Army

DATE: February 2012 Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army APPROPRIATION/BUDGET ACTIVITY **R-1 ITEM NOMENCLATURE PROJECT** 2040: Research, Development, Test & Evaluation, Army PE 0603779A: Environmental Quality 035: NATIONAL DEFENSE CNTR FOR BA 4: Advanced Component Development & Prototypes (ACD&P) ENVIRO EXCELLENCE-NDCEE Technology - Dem/Val FY 2013 FY 2013 FY 2013 Management Services (\$ in Millions) FY 2012 oco Base Total **Total Prior** Contract **Target** Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Complete **Total Cost** Contract Cost Program Management RDECOM:Aberdeen. **MIPR** 21.847 0.508 0.405 0.405 Continuing Continuing Continuing Support MD Subtotal 21.847 0.508 0.405 0.405 **FY 2013** FY 2013 FY 2013 **Product Development (\$ in Millions)** FY 2012 Base oco Total **Total Prior** Contract **Target** Method Performing Years Award Award Award Cost To Value of **Cost Category Item** & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract To Be Determined:To TBD To Be Determined 8.797 Continuing Continuing Continuing Be Determined Subtotal 8.797 FY 2013 FY 2013 FY 2013 Support (\$ in Millions) FY 2012 Base oco Total Contract **Total Prior Target** Method Performing Years Award Award Award Cost To Value of Cost Category Item & Type **Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract Concurrent Technologies **Technical Data** Various 19.367 1.780 1.968 1.968 Continuing Continuing Continuing Corporation (CTC):Johnstown, PA Subtotal 19.367 1.780 1 968 1.968 FY 2013 FY 2013 FY 2013 Test and Evaluation (\$ in Millions) FY 2012 Base oco Total **Total Prior** Contract Target Method Performing Years Award Award Award **Cost To** Value of **Cost Category Item Activity & Location** Cost Cost Date Cost Date Cost Date Cost Complete **Total Cost** Contract & Type Concurrent Development Testing and Various Technologies 21.889 2.303 1.859 1.859 Continuing Continuing Continuing Evaluation Corp.:Johnstown, PA 21.889 2.303 1 859 1.859 Subtotal

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APPROPRIATION/BUDGET ACTIVITY			R-1	R-1 ITEM NOMENCLATURE				PROJECT			
2040: Research, Development, Test & Evaluation, Army			PE	PE 0603779A: Environmental Quality 035: NATIONAL DEFENSE CNTR FOR					R		
BA 4: Advanced Component Development & Prototypes (ACD&P)			Tec	Technology - Dem/Val			ENVIRO EXCELLENCE-NDCEE				
	Ye	l Prior ears ost	FY	FY 2013 FY 201 FY 2012 Base OCO				FY 2013 Total	Cost To Complete	Total Cost	Target Value of Contract
Projec	t Cost Totals 7	71.900	4.591		4.232	-		4.232			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Army

DATE: February 2012

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APPROPRIATION/BUDGET ACT	IVITY			R-1 ITEM N	IOMENCLA [*]	TURE	ECT				
2040: Research, Development, Te	Research, Development, Test & Evaluation, Army PE 0603779A: Environmental Quality 04E: ENVIRONMENTAL RESTORATION						PE 0603779A: Environmental Quality 04E:				
BA 4: Advanced Component Deve	elopment & Pro	ototypes (AC	D&P)	Technology	- Dem/Val			TECH VALI	DATION		
COOT (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
04E: ENVIRONMENTAL	-	0.432	0.399	_	0.399	0.431	-	0.317	0.311	Continuing	Continuinç
RESTORATION TECH											

A. Mission Description and Budget Item Justification

Exhibit R-2A. RDT&E Project Justification: PB 2013 Army

Environmental Information Technology Management (EITM) includes support for Knowledge Based Corporate Reporting system (KBCRS) and Defense Environmental Network Information Exchange (DENIX). This new request for research, development, test and evaluation (RDTE) is to enhance KBCRS to a net-centric all services transactional system of record and reporting tool set. Also includes EITM upgrades to incorporate new security and other requirements.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Environmental Restoration Technology Validation	-	0.432	0.399
Articles:		0	
Description: Funding is provided for the following effort			
FY 2012 Plans: To provide system upgrades to support users with reporting requirements, for example the Annual Report to Congress.			
FY 2013 Plans: To provide system upgrades to support users with reporting requirements, for example the Annual Report to Congress.			
Accomplishments/Planned Programs Subtotals	-	0.432	0.399

C. Other Program Funding Summary (\$ in Millions)

N/A

VALIDATION

Quantity of RDT&E Articles

D. Acquisition Strategy

The U.S. Army's Environmental Quality Technology (EQT) program provides new or innovative methods, equipment, materials, and/or protocols to reduce the total cost of Army operations and/or allow training operations to continue with minimum adverse impact on the environment that result from base operations and weapons system maintenance/support activities. The restoration demonstration/validation portion of EQT is designed to support Army-wide stewardship of its lands and facilities by focusing on the transfer of potential technological solutions to restoration problems on Army installations and to industry to support restoration of Army lands to their former or redesignated use. The restoration EQT demonstration/validation program goal is to support installation needs through exploitation of technology without compromising readiness or training. It accomplishes this goal in two steps. First, Technology Teams identify, prioritize, and justify technological solutions to Army high-priority environmental quality technology restoration requirements. Second, based on Department of the Army and Office of the Secretary of Defense guidance,

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DATE: February 2012

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Exhibit R-2A, RDT&E Project Justification: PB 2013 Army		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 2040: Research, Development, Test & Evaluation, Army BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 ITEM NOMENCLATURE PE 0603779A: Environmental Quality Technology - Dem/Val	PROJECT 04E: ENVIRONMENTAL RESTORATION TECH VALIDATION
funding authority is sought through the Army's planning, programmin Technology Technical Council (ETTC; a program management coun ETTC) and, in this case, a Restoration Technology Team (composed This program is leveraging resources and knowledge gained from the Security Technology Certification Program (ESTCP) and the National E. Performance Metrics Performance metrics used in the preparation of this justification materials.	acil), an Environmental Technology Integrated I d of experts in restoration technology and in Ar e Strategic Environmental Research and Deve al Defense Center for Environmental Excellenc	Process Team, (a working group supporting the my user needs). Plopment Program (SERDP), the Environmental e (NDCEE).

PE 0603779A: Environmental Quality Technology - Dem/Val Army