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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Army									DATE: February 2010		
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							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	20.443	18.374	4.695	0.000	4.695	4.770	4.848	4.932	5.008	Continuing	Continuing
035: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE	8.371	5.541	4.695	0.000	4.695	4.770	4.848	4.932	5.008	Continuing	Continuing
E21: POLLUTION PREVENTION TECHNOLOGY DEM/VAL	0.510	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
E23: ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PILOT IN DOD	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
EN4: PLASMA ENERGY PYROLYSIS SYSTEM (PEPS)	0.796	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
EP1: ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)	10.367	12.833	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
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").											

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B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	15.304	4.770	4.720	0.000	4.720
Current President's Budget	20.443	18.374	4.695	0.000	4.695
Total Adjustments	5.139	13.604	-0.025	0.000	-0.025
• Congressional General Reductions		-0.096			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		13.700			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	-0.429	0.000			
• Adjustments to Budget Years	0.000	0.000	-0.025	0.000	-0.025
Change Summary Explanation					
FY10 Congressionally directed increases.					

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APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>				PROJECT 035: <i>NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
035: <i>NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE</i>	8.371	5.541	4.695	0.000	4.695	4.770	4.848	4.932	5.008	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>The National Defense Center for Energy and Environment(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.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1						2.255	1.513	1.325	0.000	1.325	
Management and operations of the NDCEE by the prime contractor.											

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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 035: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Industrial base integration, operation of the NDCEE environmental technology facility, and environmental information analysis.		0.625	0.500	0.500	0.000	0.500
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		5.041	2.395	2.603	0.000	2.603

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Conduct demonstration/validation of environmentally acceptable technologies that enhance military readiness and reduce production, operating, and/or disposal costs. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #4 NDCEE Government program management during contract negotiations and execution and during project formulation, execution, and technology transfer. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base		0.450	0.200	0.267	0.000	0.267

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 OCO Plans: FY 2011 OCO						
Program #5 Small Business Innovative Research/Small Business Technology Transfer Programs FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		0.000	0.133	0.000	0.000	0.000
Program #6 Congressional Project - Renewable Energy Testing Center (intended for 643779EP1). FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010		0.000	0.800	0.000	0.000	0.000

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<u>B. Accomplishments/Planned Program (\$ in Millions)</u>								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<i>FY 2011 Base Plans:</i> FY 2011 Base <i>FY 2011 OCO Plans:</i> FY 2011 OCO								
Accomplishments/Planned Programs Subtotals				8.371	5.541	4.695	0.000	4.695
<u>C. Other Program Funding Summary (\$ in Millions)</u>								
N/A								
<u>D. Acquisition Strategy</u>								
<p>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.</p>								
<u>E. Performance Metrics</u>								
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.								

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>				PROJECT 035: <i>NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Cost Category Item is empty.	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	1.289		1.200		0.000		1.200	Continuing	Continuing	0
Subtotal			0.000	1.289		1.200		0.000		1.200			0.000
Remarks													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Technical Data	C/CPFF	Concurrent Technologies Corporation (CTC) Johnstown, PA	12.500	1.140		1.120		0.000		1.120	Continuing	Continuing	0
Subtotal			12.500	1.140		1.120		0.000		1.120			0.000
Remarks													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army										DATE: February 2010			
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 035: NATIONAL DEFENSE CNTR FOR ENVIRO EXCELLENCE-NDCEE					
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Testing	C/CPFF	Concurrent Technologies Corp. Location could not be determined.	2.466	0.000		0.000		0.000		0.000	Continuing	Continuing	2.466
Development Testing - 2	C/CPFF	Concurrent Technologies Corp. Location could not be determined.	14.690	2.055		1.495		0.000		1.495	Continuing	Continuing	0
Subtotal			17.156	2.055		1.495		0.000		1.495			2.466
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	C	Office of the Assistant Sec Army (Installations and Environment) Location could not be determined.	3.431	1.057		0.880		0.000		0.880	Continuing	Continuing	0
Subtotal			3.431	1.057		0.880		0.000		0.880			0.000

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Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			33.087	5.541		4.695		0.000		4.695			2.466
Remarks													

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
E21: <i>POLLUTION PREVENTION TECHNOLOGY DEM/VAL</i>	0.510	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>This project supports Advanced Component Development and Prototypes of new and reformulated paints, paint removers, cleaners and other surface coating materials and processes for weapon systems production and maintenance operations. The project increases 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. Materials and processes demonstrated under this project are inherently compliant with all applicable National Emissions Standards for Hazardous Air Pollutants that regulate surface coating activities, thereby eliminating the need for Army installations to incur hundreds of millions of dollars in expenses to purchase, install and operate air pollution control devices. 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 new materials and processes to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals and other technical data. Test and evaluation activities are executed by Research, Development and Engineering Command (RDECOM) centers and laboratories in cooperation with the affected Life Cycle Management Commands, Program Executive Offices and Program Managers. Materials and processes are being demonstrated at ten different Army facilities in order to minimize the disruption of materiel maintenance operations at any one facility.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1						0.110	0.000	0.000	0.000	0.000	
Qualify, validate and approve reformulated Chemical Agent Resistant Coating (CARC) systems and other non-CARC paints and surface coatings											

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Qualify, validate and approve hazardous air pollutant (HAP) free solvents, thinners and cleaners		0.200	0.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #3		0.150	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Qualify, validate and approve chemical paint removers containing no methylene chloride or other HAPs FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #4 Qualify, validate and approve reformulated sealants and adhesives for high-use applications FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		0.050	0.000	0.000	0.000	0.000

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B. Accomplishments/Planned Program (\$ in Millions)														
										FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals										0.510	0.000	0.000	0.000	0.000
C. Other Program Funding Summary (\$ in Millions)														
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost			
• Ord. #1: 0603728A, <i>Environmental Quality Technology Demonstrations (025)</i>	3.610	3.640	3.799	0.000	3.799	3.883	3.968	0.000	0.000	0	10.661			
• Ord. #2: 0603804A, <i>Logistics and Engineer Equipment - Adv Dev (K42)</i>	5.190	2.951	0.480	0.000	0.480	0.000	0.000	0.000	0.000	.465	14.578			
• Ord. #3: 0605857A, <i>Environmental Quality Technology Mgmt Support (06I)</i>	0.267	0.274	0.042	0.000	0.042	0.000	0.000	0.000	0.000	.067	.650			
D. Acquisition Strategy														
The project transitions demonstrated technology directly into the Army supply system by having National Stock Numbers assigned/reassigned and immediately made available for procurement by the Defense Logistics Agency and the General Services Administration. As acquisition program managers approve the new materials and processes for use on their systems, technical writers are specifying them in the appropriate technical publications. The project is managed by the Director of the Environmental Acquisition and Logistics Sustainment Program at the Headquarters, U.S. Army RDECOM.														
E. Performance Metrics														
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.														

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COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
E23: ENVIRONMENTAL MANAGEMENT SYSTEM (EMS) PILOT IN DOD	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
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.											
B. Accomplishments/Planned Program (\$ in Millions)											
							FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #1 Demonstrated and validated EMS internet-based software applications at Department of Defense (DoD) installation sites. FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO							0.399	0.000	0.000	0.000	0.000

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<u>B. Accomplishments/Planned Program (\$ in Millions)</u>								
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Accomplishments/Planned Programs Subtotals				0.399	0.000	0.000	0.000	0.000
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A								
<u>D. Acquisition Strategy</u> N/A								
<u>E. Performance Metrics</u> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.								

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>				PROJECT EN4: <i>PLASMA ENERGY PYROLYSIS SYSTEM (PEPS)</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
EN4: <i>PLASMA ENERGY PYROLYSIS SYSTEM (PEPS)</i>	0.796	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification <p>This project addresses the use of high temperature Plasma Energy Pyrolysis Systems (PEPS) gasification process, with the primary focus on converting opportunity feedstock(s) to high quality Synthesis Gas (syngas) that can be subsequently converted to usable fuels for the Army. The specific goal of the PEPS Clean Fuels Program is to build an operational unit to gather data to demonstrate the efficiency, environmental compliance, and cost competitiveness of the gasification process for fuel applications. The objective of this task - Phase 4, is to continue to perform additional Risk Reduction Testing needed to further demonstrate and validate the applicability of PEPS gasification technology to a range of applications requiring elevated pressures and alternate plasma torch gas compositions.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1 Perform risk reduction testing to demonstrate and validate the applicability of PEPS gasification technology. <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base						0.796	0.000	0.000	0.000	0.000	

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>		R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>		PROJECT EN4: <i>PLASMA ENERGY PYROLYSIS SYSTEM (PEPS)</i>	
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>					
				FY 2009	FY 2010
				FY 2011 Base	FY 2011 OCO
				FY 2011 Total	
<i>FY 2011 OCO Plans:</i> FY 2011 OCO					
Accomplishments/Planned Programs Subtotals				0.796	0.000
				0.000	0.000
				0.000	0.000
<u>C. Other Program Funding Summary (\$ in Millions)</u> N/A					
<u>D. Acquisition Strategy</u> N/A					
<u>E. Performance Metrics</u> Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army								DATE: February 2010			
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
EP1: ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)	10.367	12.833	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
Environmental Quality Technology Dem/Val Adds (CA) - Congressional directed Army Environmental quality technology projects that address critical requirements, reduce out-year costs, and support long-term sustainability. This includes compliance, conservation, restoration and installation pollution prevention technologies. Congressional interest projects totalling \$10.367 million in FY09: Battlefield Asset Decontamination System (BARDS)(\$1.600 million); Battlefield Plastic Biodiesel (\$1.600 million); Renewable Energy Testing Center (\$1.600 million); Hawaii Undersea Chemical Military Munitions Assessment Plan (\$4.000 million); and Western Hemisphere Security Analysis Center (\$1.600 million). Congressional directed Environmental Quality Technology (EQT) projects for FY10 totalling \$12.900 million: Cadmium Emissions Reduction \$1.000 million; Vanadium Technology \$2.400 million; Environmental Management Information System (EMIS) \$2.000 million (should be in APE 643779E23), and Program increase for National Defense Center for Energy and Environment (NDCEE) \$7.500 million (should be in APE 643779035).											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
Program #1						1.595	0.000	0.000	0.000	0.000	
Battlefield Asset Decontamination System (BARDS)- Development of products designed to reduce weight, shipping constraints, water usage and cost liquid decontamination products.											
FY 2009 Accomplishments: FY 2009											
FY 2010 Plans: FY 2010											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #2 Battlefield Plastic Biodiesel-Develop a cost effective technology to recycle military plastic waster into useable fuel FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		1.595	0.000	0.000	0.000	0.000
Program #3 Renewable Energy Testing Center (RETC)-Provide metics on robustness, safety, energy efficiency and environmenatal effectiveness. FY 2009 Accomplishments: FY 2009		1.595	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #4 Hawaii Undersea Chemical Military Munitions Assessment Plan - Inspect, process and dispose of recovered military munitions and other related materials FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		3.988	0.000	0.000	0.000	0.000
Program #5 Western Hemisphere Security Analysis Center- Provide advice, analysis, and associated reports and recommendations to further advance U.S. national security objectives in the Western Hemisphere.		1.594	0.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/ VAL (CA)				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #6 Cadmium Emissions Reduction -Letterkenny Army Depot		0.000	1.000	0.000	0.000	0.000
FY 2009 Accomplishments: FY 2009						
FY 2010 Plans: FY 2010						
FY 2011 Base Plans: FY 2011 Base						
FY 2011 OCO Plans: FY 2011 OCO						
Program #7		0.000	2.333	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army			DATE: February 2010			
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/ VAL (CA)				
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Vanadium Technology Program FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO						
Program #8 Environmental Management Information System (EMIS)(should be in APE 643779E23). FY 2009 Accomplishments: FY 2009 FY 2010 Plans: FY 2010 FY 2011 Base Plans: FY 2011 Base FY 2011 OCO Plans: FY 2011 OCO		0.000	2.000	0.000	0.000	0.000

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Army				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>	R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>	PROJECT EP1: <i>ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)</i>				
<u>B. Accomplishments/Planned Program (\$ in Millions)</u>						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Program #9 Program increase for National Defense Center for Energy and Environment (NDCEE) (should be in APE 643779035). <i>FY 2009 Accomplishments:</i> FY 2009 <i>FY 2010 Plans:</i> FY 2010 <i>FY 2011 Base Plans:</i> FY 2011 Base <i>FY 2011 OCO Plans:</i> FY 2011 OCO		0.000	7.500	0.000	0.000	0.000
Accomplishments/Planned Programs Subtotals		10.367	12.833	0.000	0.000	0.000
<u>C. Other Program Funding Summary (\$ in Millions)</u>						
N/A						
<u>D. Acquisition Strategy</u>						
N/A						
<u>E. Performance Metrics</u>						
Performance metrics used in the preparation of this justification material may be found in the FY 2010 Army Performance Budget Justification Book, dated May 2010.						

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>				PROJECT EP1: <i>ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
New R3 Line	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	0	0	0
Subtotal			0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Remarks													
Support (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
New R3 Line	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	0	0	0
Subtotal			0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Remarks													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 2040: <i>Research, Development, Test & Evaluation, Army</i> BA 4: <i>Advanced Component Development & Prototypes (ACD&P)</i>				R-1 ITEM NOMENCLATURE PE 0603779A: <i>Environmental Quality Technology - Dem/Val</i>				PROJECT EP1: <i>ENVIRONMENTAL QUALITY TECH DEM/VAL (CA)</i>					
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Development Testing	C/TBD	Nothing entered for Activity and Location. Location could not be determined.	20.110	0.000		0.000		0.000		0.000	0	0	0
Subtotal			20.110	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Remarks													
Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
New R3 Line	C	Nothing entered for Activity and Location. Location could not be determined.	0.000	0.000		0.000		0.000		0.000	0	0	0
Subtotal			0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Remarks													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Army									DATE: February 2010			
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 EP1: ENVIRONMENTAL QUALITY TECH DEM/ VAL (CA)				
		Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals		20.110	0.000		0.000		0.000		0.000	0.000	0.000	0.000
Remarks												

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