Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced

PE 0603779A I Environmental Quality Technology - Dem/Val

Component Development & Prototypes (ACD&P)

1		,											
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
Total Program Element	-	2.544	7.826	8.813	-	8.813	9.120	8.468	9.589	9.342	Continuing	Continuing	
035: National Defense Cntr For Enviro Excellence	-	2.127	2.578	2.776	-	2.776	4.208	4.029	3.671	3.743	Continuing	Continuing	
04E: Environmental Restoration Tech Validation	-	0.417	-	-	-	-	-	0.308	-	-	Continuing	Continuing	
E21: POLLUTION PREVENTION TECHNOLOGY DEM/VAL	-	-	5.248	6.037	-	6.037	4.912	4.131	5.918	5.599	Continuing	Continuing	

#### Note

FY 2016 reduction attributed to realignment to other higher priority Army programs.

## 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. 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., vehicles 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 Army environmental quality technology pillars (military materials in the environment, sustainable ranges and lands, compliance, and pollution prevention). All 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").

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Army

Date: February 2015

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 4: Advanced Component Development & Prototypes (ACD&P)

PE 0603779A I Environmental Quality Technology - Dem/Val

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	2.631	7.830	9.988	-	9.988
Current President's Budget	2.544	7.826	8.813	-	8.813
Total Adjustments	-0.087	-0.004	-1.175	-	-1.175
<ul> <li>Congressional General Reductions</li> </ul>	-	-0.004			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-0.087	-			
<ul> <li>Adjustments to Budget Years</li> </ul>	-	_	-1.175	-	-1.175

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2016 A	rmy							Date: Febr	uary 2015	
Appropriation/Budget Activity 2040 / 4								•	nviro			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
035: National Defense Cntr For Enviro Excellence	-	2.127	2.578	2.776	-	2.776	4.208	4.029	3.671	3.743	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

#### **Note**

Not applicable for this item.

### 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. 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 installations. The NDCEE will continue to demonstrate, validate, and transfer these technologies supporting our integrated environment, safety, occupational health and energy objectives with full consideration of the triple bottom line of mission, environment and community.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
Title: Management and operations of the NDCEE by the prime contractor.	0.319	0.386	0.335
<b>Description:</b> Consists of the management and operation expenses required by the prime contractor to operate the NDCEE program.			
FY 2014 Accomplishments:			

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: F	ebruary 2015	
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	Project ( 035 / Nat Excellent	Enviro		
B. Accomplishments/Planned Programs (\$ in Millions)		F	Y 2014	FY 2015	FY 2016
Management and operation of the NDCEE by the prime contr	actor.				
FY 2015 Plans: Management and operation of the NDCEE by the prime contr	actor.				
FY 2016 Plans: Will consist of management and operation of the NDCEE by t	he prime contractor.				
<i>Title:</i> Industrial base integration, operation of the NDCEE envanalysis.	vironmental technology facility, and environmental information		0.242	0.293	0.26
<b>Description:</b> Funds the industrial base integration, operation information analysis by the NDCEE prime contractor.	of the NDCEE environmental technology facility, and environmental	nental			
FY 2014 Accomplishments: Funded the industrial base integration, operation of the NDCE analysis.	EE environmental technology facility, and environmental inform	ation			
FY 2015 Plans: Funds industrial base integration, operation of the NDCEE en analysis.	vironmental technology facility, and environmental information				
<b>FY 2016 Plans:</b> Will fund industrial base integration, operation of the NDCEE analysis.	environmental technology facility, and environmental informati	on			
<i>Title:</i> Conduct demonstration/validation of environmentally adproduction, operating, and/or disposal costs.	cceptable technologies that enhance military readiness and rec	luce	0.818	0.991	1.44
	nvironmental, safety, occupational health, and energy technologission. The objective is to determine if the technology is ready be production, operating, and/or disposal costs.				
FY 2014 Accomplishments: Conducted demonstration/validation of environmentally acceptoduction, operating, and/or disposal costs.	otable technologies that enhance military readiness and reduce	9			
FY 2015 Plans:					

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PE 0603779A: Environmental Quality Technology - Dem/V... Page 4 of 21 R-1 Line #63 Army

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army	1		Date: Fe	ebruary 2015			
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val		ect (Number/Name) National Defense Cntr For Enviro llence				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016		
·	able technologies that enhance military readiness and reduce demonstrated consist of technologies selected by the NDCEE cutive Advisory Board.						
	septable technologies that enhance military readiness and reducto be demonstrated will consist of technologies selected by the CEE Executive Advisory Board.	e					
<b>Title:</b> NDCEE Government program management during contechnology transfer.	ntract negotiations and during project formulation, execution, an	d	0.748	0.908	0.732		
<b>Description:</b> Funds the government program management negotiations and during project formulation, execution, and to	office for the NDCEE. This consists of personnel assisting in coechnology transfer.	ntract					
FY 2014 Accomplishments: Funded NDCEE Government program management during of execution, and technology transfer.	contract negotiations and execution and during project formulati	on,					
FY 2015 Plans: Fund NDCEE Government program management during cortechnology transfer.	ntract negotiations and during project formulation, execution, an	d					
<b>FY 2016 Plans:</b> Will fund NDCEE Government program management during technology transfer.	contract negotiations and during project formulation, execution,	and					
	Accomplishments/Planned Programs Sul	ototals	2.127	2.578	2.776		

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

N/A

### Remarks

## 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

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 4	PE 0603779A I Environmental Quality	035 / Natio	nal Defense Cntr For Enviro
	Technology - Dem/Val	Excellence	

on behalf of the Deputy Undersecretary of Defense for Installations and Environment and composed of senior DoD leadership to oversee NDCEE operations. The EAB is supported by the NDCEE Technical Working Group (TWG) that includes senior level staff members from each of the offices represented on the EAB. The NDCEE TWG coordinates all NDCEE activities, votes on proposed joint NDCEE projects, and reports back to the EAB Principals. Working at the tactical levels, three Focus Groups (evironment, safety/occupational health, and energy) were established to develop joint projects. The Army's Environmental Quality Technology Program participating in the the Focus Groups also assists in the formulation of suggested environmental technology projects to be demonstrated within the NDCEE Program. 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 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) when applicable Congressionally directed and funded tasks.

### **E. Performance Metrics**

N/A

Exhibit R-3, RDT&E	Project C	ost Analysis: PB 2	016 Army	y								Date:	February	2015		
Appropriation/Budge 2040 / 4	et Activity	у				<b>R-1 Program Element (Number/Name)</b> PE 0603779A <i>I Environmental Quality</i> <i>Technology - Dem/Val</i>					Project (Number/Name) 035 I National Defense Cntr For Enviro Excellence					
Management Service	es (\$ in N	lillions)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac	
Program Management Support	MIPR	RDECOM: Aberdeen, MD	22.713	0.748	Aug 2014	0.908	Aug 2015	0.732	Aug 2016	-		0.732	Continuing	Continuin	Continuir	
		Subtotal	22.713	0.748		0.908		0.732		-		0.732	-	-	-	
Product Developmen	nt (\$ in M	illions)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
To Be Determined	TBD	To Be Determined : To Be Determined	8.797	-		-		-		-		-	Continuing	Continuin	Continuin	
		Subtotal	8.797	-		-		-		-		-	-	-	-	
Support (\$ in Million	s)			FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
Technical Data	Various	Concurrent Technologies Corporation (CTC) : Johnstown, PA	22.888	0.561	Mar 2014	0.679	Mar 2015	0.603	Mar 2016	-		0.603	Continuing	Continuin	g Continuin	
		Subtotal	22.888	0.561		0.679		0.603		-		0.603	-	-	-	
Test and Evaluation	(\$ in Mill	ions)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract	
Development Testing and Evaluation	Various	Concurrent Technologies Corp. : Johnstown, PA	25.622	0.818	Mar 2014	0.991	Mar 2015	1.441	Mar 2016	-		1.441	Continuing	Continuin	g Continuin	
		Subtotal	25.622	0.818		0.991		1.441				1.441			_	

PE 0603779A: Environmental Quality Technology - Dem/V... Army

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2016 Army	,							Date:	February	2015			
Appropriation/Budget Activity 2040 / 4					,					Project (Number/Name) 035 / National Defense Cntr For Enviro Excellence				
Prior Years FY 2014					015	FY 2016 Base	FY 2	2016 CO	FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract		
Project Cost Totals	80.020	2.127		2.578		2.776	-		2.776	-	-	-		

Remarks

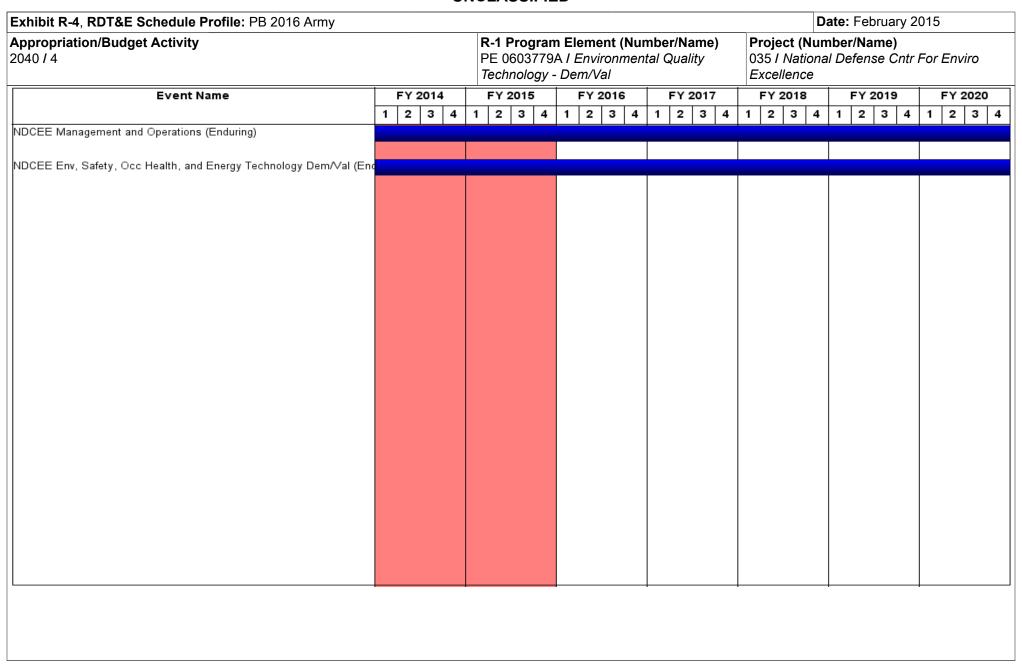


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	 umber/Name) onal Defense Cntr For Enviro

# Schedule Details

	St	nd		
Events	Quarter	Year	Quarter	Year
NDCEE Management and Operations (Enduring)	1	2014	4	2021
NDCEE Env, Safety, Occ Health, and Energy Technology Dem/Val (Enduring)	1	2014	4	2021

Exhibit R-2A, RDT&E Project Ju	stification	: PB 2016 A	rmy						,	Date: Feb	ruary 2015		
Appropriation/Budget Activity 2040 / 4					, , , , , ,						lumber/Name) ironmental Restoration Tech		
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost	
04E: Environmental Restoration Tech Validation	-	0.417	-	-	-	-	-	0.308	-	-	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

### A. Mission Description and Budget Item Justification

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)	FY 2014	FY 2015	FY 2016
Title: Environmental Restoration Technology Validation	0.417	-	-
<b>Description:</b> Conducts system enhancements as required to meet data management requirements for the Knowledge Based Corporate Reporting System and the Defense Environmental Network Information Exchange components.			
FY 2014 Accomplishments: Provided system upgrades to support users with reporting requirements, for example the Annual Report to Congress and Chemical Management Enterprise Information Integration.			
Accomplishments/Planned Programs Subtotals	0.417	_	-

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

PE 0603779A: Environmental Quality Technology - Dem/V...

			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	<b>Base</b>	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	Complete	<b>Total Cost</b>
<ul> <li>0205412A: Environmental</li> </ul>	-	0.280	-	-	-	-	-	-	-	-	0.280

Information Tech Modernization (EE6)

#### Remarks

## D. Acquisition Strategy

The Environmental Information Technology Management (EITM) Program is an Office of the Secretary of Defense sponsored program that was assigned to the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health as the Department of Defense (DoD) Executive Agent by the Under Secretary of Defense for Acquisition, Technology and Logistics in 2001. The DoD Directive 4715.1E defined EITM mission is to ensure efficient use of enterprise environment, safety and occupational health (ESOH) corporate information management processes by providing and sustaining requirement-driven ESOH corporate data management,

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 4	PE 0603779A I Environmental Quality	04E I Envir	ronmental Restoration Tech
	Technology - Dem/Val	Validation	
Congressional reporting and public outreach tools to the DoD, and other DoD	etakeholdere. Funding provided for this progra	m will allow	FITM to develop a Deputy

Congressional-reporting and public outreach tools to the DoD, and other DoD stakeholders. Funding provided for this program will allow EITM to develop a Deputy Under Secretary of Defense for Installations and Environment directed Chemical Management Enterprise Information Integration capability that will allow Army net-centric hazardous material and ESOH 2.0 NetCentric data management capabilities per the Secretary of the Army Directive 2009-03 "Army Data Management" and DoD Directive 8320.2 "Data Sharing in a Net-Centric Department of Defense." Prior to funding being committed, Army and DoD environmental information technology stakeholders meet to determine which high priority EITM interface requirements need upgrades to incorporate new security and other information technology requirements.

## E. Performance Metrics

N/A	١
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Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army	R-1 Program Element (Number/Name) Project (Number/Name)	
1	,	Project (Number/Name) 04E I Environmental Restoration Tech Validation

Test and Evaluation (	\$ in Milli	ons)		FY 2	2014	FY 2	2015		2016 ise		2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Developmental testing and evaluation for required network interfaces.	C/FFP	Delta Resources : Arlington, VA	0.728	0.417	Aug 2014	-		-		-		-	-	1.145	-
		Subtotal	0.728	0.417		-		-		-		-	-	1.145	-
															Target

								'	Target
	Prior			FY 2016	FY 2016	FY 2016	Cost To	Total	Value of
	Years	FY 2014	FY 2015	Base	oco	Total	Complete	Cost	Contract
Project Cost Totals	0.728	0.417	-	-	-	-	-	1.145	-

Remarks

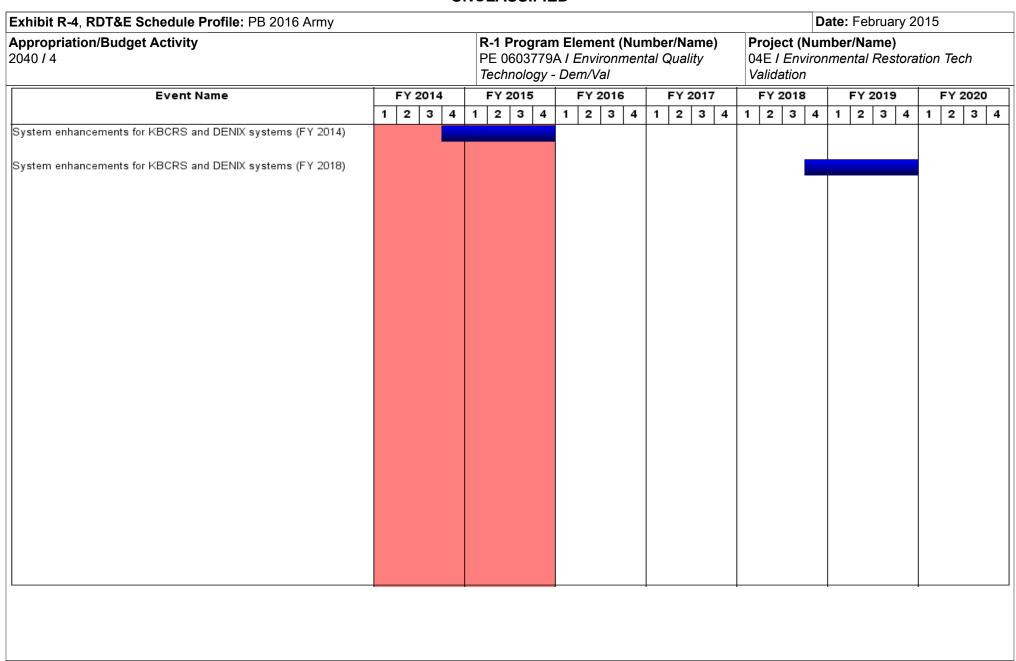


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	, ,	umber/Name) ronmental Restoration Tech

# Schedule Details

	St	art	E	nd
Events	Quarter	Year	Quarter	Year
System enhancements for KBCRS and DENIX systems (FY 2014)	4	2014	4	2015
System enhancements for KBCRS and DENIX systems (FY 2018)	4	2018	4	2019

Exhibit R-2A, RDT&E Project Ju	stification	PB 2016 A	rmy							Date: Febr	uary 2015	
Appropriation/Budget Activity 2040 / 4					PE 0603779A I Environmental Quality E21 I POLL				lumber/Name) LUTION PREVENTION .OGY DEM/VAL			
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
E21: POLLUTION PREVENTION TECHNOLOGY DEM/VAL	-	-	5.248	6.037	-	6.037	4.912	4.131	5.918	5.599	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

#### Note

New Starts FY 2016: Environmental quality technology demonstration and validation: SafePort, ESOH Impacts of Short-Term Noise Assessment Procedures, and Advanced Water Reuse Technology for Fixed Installations.

### A. Mission Description and Budget Item Justification

This project supports Advanced Component Development and Prototypes of environmental quality technologies developed within the Army Environmental Quality Technology program. The project increases operational sustainment and warfighter training capabilities by reducing soldier and worker health risks and environmental quality impacts that would otherwise result in restoration needs and compliance enforcement actions against installations while simultaneously increasing performance and standardization across the Army. The project expedites technology transition from the laboratory to operational use by demonstrating new materials and processes to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals, Drawings and other technical data. Materials and processes demonstrated under this project are inherently more sustainable than the baseline with respect to environmental, safety and occupational health concerns, thereby reducing life cycle costs incurred by acquisition, industrial base and installation end users.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
<b>Title:</b> Environmental quality technology demonstration and validation: Toxic Metal Reduction in Surface Finishing of Army Weapon Systems	-	4.318	2.638
<b>Description:</b> Increase readiness and environmental sustainability of Army depots and maintenance facilities by reducing or eliminating the use of hexavalent chromium, cadmium and associated toxic or carcinogenic materials used in surface finishing processes.			
FY 2015 Plans: Conduct large-scale demonstrations of sustainable alternatives for mixed metal pretreatment, aluminum anodizing and hard chrome electroplating processes.			
FY 2016 Plans: Will conduct large-scale demonstrations of sustainable alternatives for conversion coating, surface activation and copper/silver electroplating processes.			
Title: Environmental quality technology demonstration and validation: Airborne Lead Reduction from Army Weapon Systems	_	0.930	1.467

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army			Date: F	ebruary 2015	5
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	E21 / P	t (Number/I POLLUTION NOLOGY DE	)N	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2014	FY 2015	FY 2016
<b>Description:</b> Sustain soldier training readiness and ensure complead compounds in rocket and missile propellants and primary ex		use of			
FY 2015 Plans:  Demonstrate large-scale producibility of a promising lead-free pridetonator in a relevant end item configuration.	imary explosive composition and demonstrate a lead-free s	tab			
FY 2016 Plans: Will qualify a promising lead-free primary explosive composition a end item configuration.	and will demonstrate a lead-free percussion primer in a rele	evant			
Title: Environmental quality technology demonstration and validate	ation: SafePort		-	-	1.06
<b>Description:</b> Demonstrate and validate rapid detection capability of lead, cadmium, and perchlorate as well as dispersed oil detect field usage greatly reducing environmental compliance costs using	tion and pathogenic water organism detection in laboratory				
FY 2016 Plans: Will fund the initial field demonstration and performance testing of evaluate comparative costs and compliance detection thresholds testing of perchlorate and heavy metal technologies along with dathresholds.	s. Also will fund continuing field demonstrations and perform	nance			
<b>Title:</b> Environmental quality technology demonstration and validate Procedures	ation: ESOH Impacts of Short-Term Noise Assessment		-	-	0.42
<b>Description:</b> Demonstrate and validate the technologies, including short-term noise assessment procedures on environmental footp 1) have validated short-term noise assessment procedures, including modules for Sustainable Range Program range officers on performance.	orint and Soldier readiness. When completed the program valding uncertainty metrics and 2) have on-line, self-guided tr	vill: ainig			
FY 2016 Plans: Incorporate community response blast noise metrics into all shor commence.	t-term noise assessment tools. Demonstration field studies	s will			
Title: Environmental quality technology demonstration and valida	ation: Advanced Water Reuse Technology for Fixed Installa	tions	_	_	0.44

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PE 0603779A: Environmental Quality Technology - Dem/V... Army Page 17 of 21 R-1 Line #63

Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
2040 / 4	PE 0603779A I Environmental Quality	E21 I POLLUTION PREVENTION
	Technology - Dem/Val	TECHNOLOGY DEM/VAL
	•	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2014	FY 2015	FY 2016
<b>Description:</b> Demonstrate and validate andvanced water reuse technology for fixed installations and assess ESOH impacts. At the completion of this program, the following will be accomplished: 1) demonstration of energy efficient advanced water reuse technology at installations, 2) ESOH analysis of three wate reuse technologies for installations including shower water recycling, distributed water reclamation, and centralized reclamation; 3) reports on best practices for permitting, design, and safe operation of advanced reuse technologies; and 4) marketing materials comparing quality of advanced reuse water to tap and bottled water to support technology adoption campaigns at installations and contingency bases.			
FY 2016 Plans: Analysis of toxicity and full suite of potential water contaminants (Disinfection By-Products, Pentachlorophenol, viruses, Total Organic Carbon) at Technology Enabled Capabilities Demonstration sites and at active Environmental Security Technology Certification Program demonstration sites; permitting of advanced water reuse technology demonstration; and contracting for a demonstration/validation prototype.			
Accomplishments/Planned Programs Subtotals	-	5.248	6.037

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

			FY 2016	FY 2016	FY 2016					Cost To	
<u>Line Item</u>	FY 2014	FY 2015	<u>Base</u>	OCO	<u>Total</u>	FY 2017	FY 2018	FY 2019	FY 2020	<b>Complete</b>	<b>Total Cost</b>
<ul> <li>0605857A: Pollution</li> </ul>	-	0.272	0.272	-	0.272	0.436	0.533	0.391	0.514	Continuing	Continuing
Prevention Tech Support (06I)											

#### Remarks

## D. Acquisition Strategy

The project ultimately transitions successfully demonstrated environmental quality technologies to Army acquisition, industrial base and installation end users. As part of the Army's Environmental Quality Technology Program, all technology efforts address a valid Army Environmental Requirements and Technology Assessments (AERTA) requirement. The Army's Environmental Technology Integrated Product Team conducts a thorough assessment and makes funding recommendations to senior Army environmental leadership. Efforts approved by senior Army environmental leadership receive Advanced Component Development and Prototype funding to fully demonstrate and validate the technology for transition to end users for follow on implementation.

#### E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	E21 <i>I PÒL</i>	umber/Name) LUTION PREVENTION .OGY DEM/VAL

Test and Evaluation	(\$ in Milli	ons)		FY	2014	FY 2	2015	FY 2 Ba	2016 ise		2016 CO	FY 2016 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Conduct Demonstrations	MIPR	Varies : Varies	0.000	-		5.248		6.037		-		6.037	Continuing	Continuing	Continuing
		Subtotal	0.000	-		5.248		6.037		-		6.037	-	-	-
			Prior Years	FY:	2014	FY 2	2015	FY 2 Ba	2016 ise		2016 CO	FY 2016 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	0.000	-		5.248		6.037		-		6.037	-	-	-

**Remarks** 

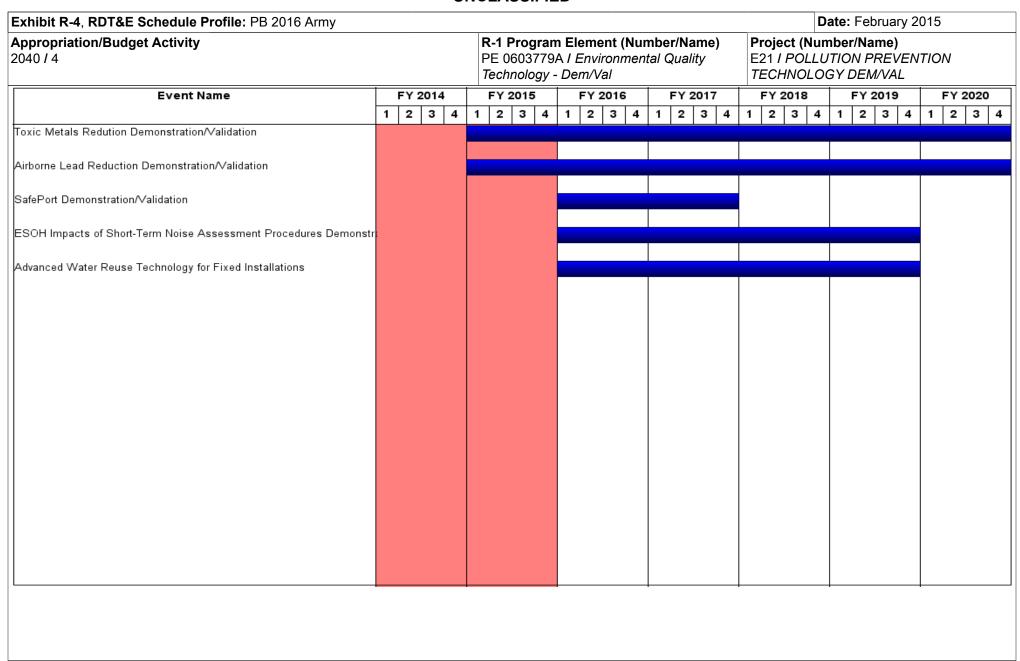


Exhibit R-4A, RDT&E Schedule Details: PB 2016 Army			Date: February 2015
Appropriation/Budget Activity 2040 / 4	R-1 Program Element (Number/Name) PE 0603779A I Environmental Quality Technology - Dem/Val	E21 <i>I PÒL</i>	umber/Name) LUTION PREVENTION OGY DEM/VAL

# Schedule Details

	Start		End		
Events	Quarter	Year	Quarter	Year	
Toxic Metals Redution Demonstration/Validation	1	2015	4	2021	
Airborne Lead Reduction Demonstration/Validation	1	2015	4	2021	
SafePort Demonstration/Validation	1	2016	4	2017	
ESOH Impacts of Short-Term Noise Assessment Procedures Demonstration/Validation	1	2016	4	2019	
Advanced Water Reuse Technology for Fixed Installations	1	2016	4	2019	