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<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2016 Army	<b>Date:</b> February 2015
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<b>Appropriation/Budget Activity</b> 2040: <i>Research, Development, Test &amp; Evaluation, Army</i> / BA 6: <i>RDT&amp;E Management Support</i>					<b>R-1 Program Element (Number/Name)</b> PE 0605857A / <i>Environmental Quality Technology Mgmt Support</i>							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016 Base</b>	<b>FY 2016 OCO</b>	<b>FY 2016 Total</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	-	5.019	2.611	3.186	-	3.186	3.402	5.107	2.940	3.111	-	-
031: <i>Environmentally Sustainable Acquisition/Logistics</i>	-	4.135	2.339	2.914	-	2.914	2.966	4.554	2.549	2.597	-	-
06H: <i>Unexploded Ordnance Clearance Technology Support</i>	-	0.884	-	-	-	-	-	-	-	-	-	-
06I: <i>POLLUTION PREVENTION TECH SUPPORT</i>	-	-	0.272	0.272	-	0.272	0.436	0.553	0.391	0.514	-	-

**Note**

FY16 reductions attributed to realignment to other higher priority Army programs.

**A. Mission Description and Budget Item Justification**

This program resources environmental quality technology (EQT) related management support functions including support of research, development, test and evaluation required for EQT technical integration efforts at demonstration/validation test sites, technical information and activities, test facilities and general test instrumentation, and EQT requirement assessments. Funds required to support the management of technology transfer associated with technology demonstrated and validated as part of Army EQT projects are included in this program element. In addition, support to the Army weapon system acquisition community to address generic pollution prevention related requirements are included under the Environmentally Sustainable Acquisition/Logistics Program.

The Environmentally Sustainable Acquisition/Logistics project includes program management for developing acquisition strategies that both achieve system key performance parameters and sustain the environment without permanent and unacceptable change in the natural environment or human health from system concept refinement through disposal. It includes systematic consideration of environmental impacts, energy use, natural resources, installation impacts, economics, and quality of life. It provides support to the system acquisition community, e.g., program and project managers, to integrate environmental quality analyses into the system acquisition process. The goal is to resolve environmental quality issues related to weapon systems that are identified during design, development, testing, operation, or support to reduce Army environmental liabilities and total ownership costs and includes efforts to eliminate the use of hazardous and ozone-depleting materials from weapon systems and facilities and to ensure the availability of Halon 1301 to support weapon system fire suppression requirements.

The Unexploded Ordnance Detection and Clearance project, beginning in FY 2004, is being overseen by the Army. The project had been overseen by Office of the Secretary of Defense in prior years. This project funds the Unexploded Ordnance Center of Excellence (UXOCOE) to provide for coordination of unexploded ordnance (UXO) technologies across the Department of Defense.

The Pollution Prevention Tech Support project funds the management support costs to execute the Toxic Metals Reduction and Airborne Lead Reduction environmental quality technology programs.

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Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
2040: Research, Development, Test & Evaluation, Army / BA 6: RDT&E Management Support		PE 0605857A / Environmental Quality Technology Mgmt Support			
B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	5.191	2.612	4.093	-	4.093
Current President's Budget	5.019	2.611	3.186	-	3.186
Total Adjustments	-0.172	-0.001	-0.907	-	-0.907
• Congressional General Reductions	-	-0.001			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.172	-			
• Adjustments to Budget Years	-	-	-0.907	-	-0.907

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army										Date: February 2015		
Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605857A / Environmental Quality Technology Mgmt Support				Project (Number/Name) 031 / Environmentally Sustainable Acquisition/Logistics			
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
031: Environmentally Sustainable Acquisition/Logistics	-	4.135	2.339	2.914	-	2.914	2.966	4.554	2.549	2.597	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

**A. Mission Description and Budget Item Justification**

The Environmentally Sustainable Acquisition/Logistics (ESAL) project provides support to the system acquisition community to integrate environmental quality (EQ) issues and concerns into the life cycle system acquisition process. To a much lesser extent, safety, occupational health (OH) and energy efficiency are also addressed. The focus of ESAL is on improving readiness, improving acquisition processes, reducing supportability burden, and minimizing total ownership cost. The Assistant Secretary of the Army for Installations, Energy and Environment [ASA(IE&E)] has defined the functions of the ESAL project in coordination with the Army Acquisition Executive and the Assistant Secretary of the Army (Acquisition, Logistics, and Technology). This project provides direct support to the Army acquisition community to pursue environmental sustainability and comply with legal statutes, policies and regulations during the life cycle of Army materiel. ESAL helps the Army achieve compliance with its weapon systems, industrial base, field and deployed activities directed by international treaties, Federal statutes, Executive Orders, Department of Defense (DoD) and Army policies and regulations.

**B. Accomplishments/Planned Programs (\$ in Millions)**

	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
<b>Title:</b> Environmental Quality (EQ) Support	1.073	1.109	1.150
<b>Description:</b> Provide EQ Support to Acquisition Programs			
<b>FY 2014 Accomplishments:</b> Provided support to Program Executive Offices/Program Managers (PEOs/PMs) to integrate EQ considerations into systems engineering activities. This included fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Analyzed impending legal statutes impacting production, operation and support of weapon systems. Assessed weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues affecting industrial base and garrisons. Provided Army acquisition community representation in select OSD and DA committees addressing environmental legislation and rulemaking.			
<b>FY 2015 Plans:</b> Provide support to PEOs/PMs to integrate EQ considerations into systems engineering activities. This includes fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Analyze			

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>			<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>
impending legal statutes impacting production, operation and support of weapon systems. Assess weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues affecting industrial base and garrisons. Provide Army acquisition community representation in select OSD and DA committees addressing environmental legislation and rulemaking.					
<b>FY 2016 Plans:</b> Will provide support to PEOs/PMs to integrate EQ considerations into systems engineering activities. This will include fulfillment of National Environmental Policy Act requirements, definition of EQ technology needs to meet operational requirements, analysis of technical data to support implementation decisions, participation in technical and cost risk assessment activities, and assessment and revision of contractual and operational requirements for successful technology integration, operation and support. Will analyze impending legal statutes impacting production, operation and support of weapon systems. Will assess weapon system readiness impacts (e.g., production levels, training, operational tempo and maintenance activities) resulting from EQ issues affecting industrial base and garrisons. Will provide Army acquisition community representation in select OSD and DA committees addressing environmental legislation and rulemaking.					
<b>Title:</b> Environmental Quality (EQ) Technology Management <b>Description:</b> Provide management support for Army EQ technology efforts.			0.832	0.835	0.865
<b>FY 2014 Accomplishments:</b> Provided system acquisition support to the Army's Environmental Technology Technical Council (ETTC) and coordination of EQ-related systems' needs for expanded RDT&E efforts. Managed and oversaw technology integration efforts by Army Life Cycle Management Commands for weapon systems in all stages of design, procurement and operations/support. Coordinated RDT&E BA-2 requirements among members of the Pollution Prevention Technology Team, coordinate RDT&E BA-3 and BA-4 technology evaluations and operational requirements in support of weapon system platform integration, managed and oversaw test plan development, oversaw testing activities, and analyzed test results to support weapon systems engineering decision making. Managed development and execution of plans for the following pollution prevention technology areas: reformulation of materials used in ammunition and pyrotechnics to remove hazardous constituents; Zero Footprint Camp to reduce the fuel and water logistics burden in Overseas Contingency Operations; Reductions in Toxic Metals Used in Surface Finishing on Army Weapon Systems; and Airborne Lead Reduction in Army Weapon Systems.					
<b>FY 2015 Plans:</b> Provide system acquisition support to the Army's EQ technology program and coordination of EQ-related systems' needs for expanded RDT&E efforts. Manage and oversee technology integration efforts by Army Life Cycle Management Commands for weapon systems in all stages of design, procurement and operations/support. Coordinate RDT&E requirements among members of the Pollution Prevention Technology Team, coordinate technology evaluations and operational requirements in support of					

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Exhibit R-2A, RDT&E Project Justification: PB 2016 Army		Date: February 2015		
Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605857A / Environmental Quality Technology Mgmt Support	Project (Number/Name) 031 / Environmentally Sustainable Acquisition/Logistics		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015	FY 2016
weapon system platform integration, manage and oversee test plan development, oversee testing activities, and analyze test results to support weapon systems engineering decision making.  <b>FY 2016 Plans:</b> Will provide system acquisition support to the Army's EQ technology program and coordination of EQ-related systems' needs for expanded RDT&E efforts. Will manage and oversee technology integration efforts by Army Life Cycle Management Commands for weapon systems in all stages of design, procurement and operations/support. Will coordinate RDT&E requirements among members of the Pollution Prevention Technology Team, will coordinate technology evaluations and operational requirements in support of weapon system platform integration, will manage and oversee test plan development, will oversee testing activities, and will analyze test results to support weapon systems engineering decision making.				
<b>Title:</b> Ozone Depleting Substance Management  <b>Description:</b> Oversee Army efforts to manage the use/elimination of ozone depleting substances on Army weapon systems.  <b>FY 2014 Accomplishments:</b> Oversaw Army efforts to manage the use/elimination of ozone-depleting substances on Army weapon systems. Monitored the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Coordinated with Program Executive Offices/Program Managers (PEOs/PMs) to affect system replacement and retrofit to eliminate ozone depleting substances while minimizing greenhouse gases and will obtain approval to require use of Halon in new contracts.  <b>FY 2015 Plans:</b> Oversee Army efforts to manage the use/elimination of ozone-depleting substances on Army weapon systems. Monitor the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Coordinate with PEOs/PMs to affect system replacement and retrofit to eliminate ozone depleting substances while minimizing greenhouse gases and obtain approval to require use of Halon in new contracts.  <b>FY 2016 Plans:</b> Will oversee Army efforts to manage the use/elimination of ozone-depleting substances on Army weapon systems. Will monitor the Army's reserve of ozone-depleting substances that contains the Army's strategic supplies of Halon used for explosion and fire suppression systems and R-22 used in fielded environmental control units. Will coordinate with PEOs/PMs to affect system replacement and retrofit to eliminate ozone depleting substances while minimizing greenhouse gases and to obtain approval to require use of Halon in new contracts.		0.298	0.395	0.410
<b>Title:</b> Headquarters Army Environmental System (HQAES)		1.932	-	0.489

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2014</b>	<b>FY 2015</b>
<b>Description:</b> Headquarters Army Environmental System (HQAES) support.  <b>FY 2014 Accomplishments:</b> Supported Headquarters Army Environmental System (HQAES) modifications recommended by Configuration Control Management Board in order to support network security worthiness.  <b>FY 2016 Plans:</b> Will support Headquarters Army Environmental System (HQAES) modifications recommended by Configuration Control Management Board in order to support network security worthiness.			
<b>Accomplishments/Planned Programs Subtotals</b>		4.135	2.339
<b>C. Other Program Funding Summary (\$ in Millions)</b>			
N/A			
<b>Remarks</b>			
<b>D. Acquisition Strategy</b>			
N/A			
<b>E. Performance Metrics</b>			
N/A			

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Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605857A / Environmental Quality Technology Mgmt Support				Project (Number/Name) 06H / Unexploded Ordnance Clearance Technology Support			
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
06H: Unexploded Ordnance Clearance Technology Support	-	0.884	-	-	-	-	-	-	-	-	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
A. Mission Description and Budget Item Justification												
This effort was devolved to the Army from the office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)). This effort funds the Unexploded Ordnance Center of Excellence (UXOCOE), which provides the day-to-day management, coordination, and information clearinghouse functions, and serves as the Department of Defense's (DoD) center for coordinating Unexploded Ordnance (UXO) Research, Development, Test and Evaluation (RDT&E) requirements and programs across DoD; develops and promotes standards for testing, modeling, and evaluation; maintains information on technologies for UXO detection and clearance; publishes an annual report summarizing the activities and accomplishments of the UXOCOE in order to improve the effectiveness and economy of UXO detection and clearance RDT&E efforts throughout DoD; and gathers and maintains a database for the results of these efforts. The Army manages, oversees, and coordinates this effort on behalf of the office of the USD(AT&L).												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Coordinate/collect/analyze UXO RDT&E information via conferences, seminars, and workshops.									0.486	-	-	
Description: Coordinate/collecte/analyze UXO RDT&E information via conferences, seminars, and workshops.												
FY 2014 Accomplishments: Catalogued and conducted analysis of explosive hazards requirements and technologies across the detection and neutralization tenets to identify explosive hazards technology capability gaps and leveraging opportunities found across DoD and other research and engineering activities.												
Title: Generate an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.									0.183	-	-	
Description: Generate an annual UXO Clearance Report focused on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.												
FY 2014 Accomplishments: Generated an annual UXO Clearance Report focusing on UXO RDT&E efforts for countermine, explosive ordnance disposal, UXO remediation, humanitarian demining, and active range clearance.												
Title: Maintain and update the UXO clearance/detection databases and computer web site and analyze data from and programs in UXO RDT&E for potential solutions to UXO related needs.									0.161	-	-	

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<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2014</b>	<b>FY 2015</b>
<b>Description:</b> Maintain and update the UXO clearance/detection databases and computer web site and analyze data from and programs in UXO RDT&E for potential solutions to UXO related needs.  <b>FY 2014 Accomplishments:</b> Maintained and updated the UXO clearance/detection databases and computer web site and analyzed data from programs in UXO RDT&E for potential solutions to UXO related needs.			
<b>Title:</b> Maintain awareness of UXO issues  <b>Description:</b> Conduct and attend requirements and technology conferences, seminars and workshops and meetings to coordinate and improve the awareness of explosive hazards technology research and engineering initiatives being developed.  <b>FY 2014 Accomplishments:</b> Planned, organized and conducted an annual explosive hazards technology coordination meeting bringing together the major Military Service and OSD technologists and program managers. Identify and participate in DoD, industry and academia sponsored meetings and symposiums. Updated on a quarterly basis UXOCOE information products with information collected at various meetings and conferences. Identified and disseminated technology leveraging opportunities within explosive hazards community.		0.054	-
<b>Accomplishments/Planned Programs Subtotals</b>		0.884	-
<b>C. Other Program Funding Summary (\$ in Millions)</b> N/A  <b>Remarks</b>  <b>D. Acquisition Strategy</b> N/A  <b>E. Performance Metrics</b> N/A			



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Appropriation/Budget Activity 2040 / 6					R-1 Program Element (Number/Name) PE 0605857A / Environmental Quality Technology Mgmt Support				Project (Number/Name) 06I / POLLUTION PREVENTION TECH SUPPORT			
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
06I: POLLUTION PREVENTION TECH SUPPORT	-	-	0.272	0.272	-	0.272	0.436	0.553	0.391	0.514	-	-
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		
Note FY 2015: Increase in Project 06I is to fund the management support for the demonstration and validation of two Army Environmental Quality Technology programs.												
A. Mission Description and Budget Item Justification This project provides RDTE Management Support for the demonstration and validation of weapon system pollution prevention technologies within the Army's Environmental Quality Technology program. The project increases operational sustainment and warfighter training capabilities by reducing soldier and worker health risks and environmental impacts that would otherwise result in restoration needs and compliance enforcement actions against installations while simultaneously increasing performance and standardization across the Army. This project provides for management of RDTE activities conducted under project 0603779A, Environmental Quality Technology Dem/Val (E21). The project expedites technology transition from the laboratory to operational use by supporting the demonstration of new materials and processes to fulfill the performance requirements outlined in Material Specifications, Depot Maintenance Work Requirements, Technical Manuals, Drawings and other technical data.												
B. Accomplishments/Planned Programs (\$ in Millions)									FY 2014	FY 2015	FY 2016	
Title: Management of pollution prevention technology programs									-	0.272	0.272	
Description: Manage and oversee the demonstration/validation of weapon system pollution prevention technologies within the Army's Environmental Quality Technology Program.												
FY 2015 Plans: Manage and oversee the demonstration/validation of two pollution prevention technology efforts: Toxic Metal Reduction in Surface Finishing of Army Weapon Systems, and Airborne Lead Reduction from Army Weapon Systems												
FY 2016 Plans: Will manage and oversee the demonstration/validation of two pollution prevention technology efforts: Toxic Metal Reduction in Surface Finishing of Army Weapon Systems, and Airborne Lead Reduction from Army Weapon Systems.												
Accomplishments/Planned Programs Subtotals									-	0.272	0.272	
C. Other Program Funding Summary (\$ in Millions) N/A												

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Appropriation/Budget Activity 2040 / 6	R-1 Program Element (Number/Name) PE 0605857A / Environmental Quality Technology Mgmt Support	Project (Number/Name) 06I / POLLUTION PREVENTION TECH SUPPORT
C. Other Program Funding Summary (\$ in Millions)		
Remarks		
D. Acquisition Strategy		
N/A		
E. Performance Metrics		
N/A		