# FISCAL YEAR (FY) 2018 BUDGET ESTIMATES

May 2017



CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE

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### FISCAL YEAR (FY) 2018 BUDGET ESTIMATES CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE

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# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

02 May 2017

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base
Chem Agents & Munitions Destruction	699,821	698,491	825,491
Total Department of the Army	699,821	698,491	825,491

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

02 May 2017

FY 2017 FY 2017 FY 2017 Total FY 2017 Less Enacted PB Request PB Requests\* Div B Remaining Req with CR Adj with CR Adj P.L.114-254\*\* with CR Adj oco oco oco oco ------

Appropriation

Chem Agents & Munitions Destruction

Total Department of the Army

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

02 May 2017

appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO
Chem Agents & Munitions Destruction	698,491	825,491		825,491
Total Department of the Army	698,491	825,491		825,491

# Department of the ArmyFY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

02 May 2017

V.	FY 2018	FY 2018	FY 2018
ppropriation	Base	oco	Total
Chem Agents & Munitions Destruction	961,732		961,732
Total Department of the Army	961,732		961,732

#### Defense-Wide

### FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: Chem Agents & Munitions Destruction

Budget Activity	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base
01. Operation And Maintenance	118,198	147,282	147,282
02. Research, Development, Test, And Evaluation	579,342	388,609	515,609
03. Procurement	2,281	15,132	15,132
20. Undistributed		147,468	147,468
Total Chem Agents & Munitions Destruction	699,821	698,491	825,491

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02 May 2017

#### Defense-Wide

### FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

02 May 2017

Appropriation: Chem Agents & Munitions Destruction

FY 2017 FY 2017 FY 2017 Total Less Enacted FY 2017 PB Request PB Requests\* Div B Remaining Req with CR Adj with CR Adj P.L.114-254\*\* with CR Adj oco OCO OCO oco

Budget Activity

- 01. Operation And Maintenance
- 02. Research, Development, Test, And Evaluation
- 03. Procurement
- 20. Undistributed

Total Chem Agents & Munitions Destruction

### Defense-Wide FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: Chem Agents & Munitions Destruction

	FY 2017 Total	FY 2017 Total	FY 2017 Less Enacted	FY 2017
	PB Requests**	PB Requests*	Div B	Remaining Req
	with CR Adj	with CR Adj	P.L.114-254**	with CR Adj
Budget Activity	Base+OCO+SAA	Base + OCO	OCO	Base + OCO
	X		****	
01. Operation And Maintenance	147,282	147,282		147,282
02. Research, Development, Test, And Evaluation	388,609	515,609		515,609
03. Procurement	15,132	15,132		15,132
20. Undistributed	147,468	147,468		147,468
Total Chem Agents & Munitions Destruction	698,491	825,491		825,491

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#### Defense-Wide

#### FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

Appropriation: Chem Agents & Munitions Destruction

	FY 2018	FY 2018	FY 2018
Budget Activity	Base	oco	Total
	/20000000000		
01. Operation And Maintenance	104,237		104,237
02. Research, Development, Test, And Evaluation	839,414		839,414
03. Procurement	18,081		18,081
20. Undistributed			
Total Chem Agents & Munitions Destruction	961,732		961,732

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# Defense-Wide FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

02 May 2017

FY 2017

Appropriation: 0390D Chem Agents & Munitions Destruction

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	Total PB Requests* with CR Adj Base	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	C
Budget Activity 01: Operation And Maintenance					
Operation & Maintenance					
1 Chem Demilitarization - O&M		118,198	147,282	147,282	U
Total Operation And Maintenance		118,198	147,282	147,282	
Budget Activity 02: Research, Development, Test, And	Evaluati	on			
RDT&E					
2 Chem Demilitarization - RDT&E		579,342	388,609	515,609	U
Total Research, Development, Test, And Evaluation		579,342	388,609	515,609	
Budget Activity 03: Procurement					
Procurement					
3 Chem Demilitarization - Proc		2,281	15,132	15,132	Ü
Total Procurement		2,281	15,132	15,132	
Budget Activity 20: Undistributed					
Undistributed					
4 Adj to Match Continuing Resolution			147,468	147,468	U
Total Undistributed			147,468	147,468	
Total Chem Agents & Munitions Destruction		699,821	698,491	825,491	

#### Defense-Wide FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

02 May 2017

Appropriation: 0390D Chem Agents & Munitions Destruction

Line	Ident	FY 20 PB Rec with CF OCC	quest R Adj	FY 20 Tota PB Requ with CR OCO	l ests* .Adj	FY 20 Less Er Div P.L.114- OCC	acted B 254**	FY 20 Remaining with CH OCC	ng Req R Adj	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	С
Budget Activity 01: Operation And Maintenance					1.000000	9		-		_
Operation & Maintenance										
1 Chem Demilitarization - O&M										U
Total Operation And Maintenance		v				( <del>*******</del>	THERE			
Budget Activity 02: Research, Development, Test, And	d Evaluati	lon								
RDT&E										
2 Chem Demilitarization - RDT&E						Salama				U
Total Research, Development, Test, And Evaluation										
Budget Activity 03: Procurement										
Procurement										
3 Chem Demilitarization - Proc										U
Total Procurement		~==-		and the last						
Budget Activity 20: Undistributed										
Undistributed										
4 Adj to Match Continuing Resolution										U
Total Undistributed						-				
Total Chem Agents & Munitions Destruction										

# Defense-Wide FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

tional Authority 02 May 2017

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017 Remaining Req with CR Adj S Base + OCO e Quantity Cost c
Budget Activity 01: Operation And Maintenance					
Operation & Maintenance					
1 Chem Demilitarization - O&M		147,282	147,282		147,282 U
Total Operation And Maintenance		147,282	147,282	***	147,282
Budget Activity 02: Research, Development, Test,	And Evaluati	on			
RDT&E					
2 Chem Demilitarization - RDT&E		388,609	515,609		515,609 U
Total Research, Development, Test, And Evaluation		388,609	515,609		515,609
Budget Activity 03: Procurement					
Procurement					
3 Chem Demilitarization - Proc		15,132	15,132		15,132 U
Total Procurement		15,132	15,132		15,132
Budget Activity 20: Undistributed					
Undistributed					
4 Adj to Match Continuing Resolution		147,468	147,468		147,468 U
Total Undistributed		147,468	147,468		147,468
Total Chem Agents & Munitions Destruction		698,491	825,491	**********	825,491

#### Defense-Wide FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No Item Nomenclature Budget Activity 01: Operation And Maintenance	Ident Code	FY 201 Base Quantity		FY 203 OCO Quantity	Cost	FY 20 Tota Quantity		S e C
Operation & Maintenance								
1 Chem Demilitarization - O&M			04,237				.04,237	
Total Operation And Maintenance			14,237	-			.04,237	
Budget Activity 02: Research, Development, Test, And	Evaluatio	on						
RDT&E								
2 Chem Demilitarization - RDT&E			9,414			8	39,414	U
Total Research, Development, Test, And Evaluation			9,414			8	39,414	*:
Budget Activity 03: Procurement								
**************************************								
Procurement								
3 Chem Demilitarization - Proc			8,081				18,081	
Total Procurement			8,081				18,081	g
Budget Activity 20: Undistributed								
Undistributed								
4 Adj to Match Continuing Resolution								Ū
Total Undistributed						===		g:
Total Chem Agents & Munitions Destruction			1,732	12000			 61,732	22

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02 May 2017

#### CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE

#### APPROPRIATION LANGUAGE

#### Fiscal Year 2018

For expenses not otherwise provided for, necessary for the destruction of the United States stockpile of lethal chemical agents and munitions in accordance with the provisions of Section 1412 of the Department of Defense Authorization Act for Fiscal Year 1986 (50 U.S.C. 1521), and for the destruction of other chemical warfare materials that are not in the chemical weapon stockpile, \$961,732,000 of which:

- (1) \$104,237,000 shall be for operations and maintenance, of which not less than \$49,401,000 shall be for the Chemical Stockpile Emergency Preparedness Program, consisting of \$21,045,000 for activities on military installations and \$28,356,000, to remain available until September 30, 2019 to assist State and local governments.
- (2) \$839,414,000, to remain available until September 30, 2019, shall be for research, development, test and evaluation, of which \$831,900,000 shall be only for the Assembled Chemical Weapons Alternatives (ACWA) Program;
- (3) \$18,081,000, to remain available until September 30, 2020, shall be for procurement for the Chemical Emergency Preparedness Program, consisting of \$1,294,000 for military installations and \$16,787,000 to assist State and local governments.

### JUSTIFICATION OF BUDGET ESTIMATE SUBMISSION CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE

#### APPROPRIATION JUSTIFICATION

(In Thousands of Dollars)

FY 2018 Estimate \$961,732

FY 2017 Amended \$678,023

FY 2016 Actual \$699,821

#### Part I - Purpose and Scope

The Chemical Demilitarization Program is a national program of high significance to the Army, the Departments of Defense and State, the Administration, the Congress, and the international community. This is a congressionally mandated program. The objective of the Chemical Demilitarization Program is to destroy the U.S. inventory of lethal chemical agents and munitions and related (non-stockpile) material; thus avoiding future risks and costs associated with its continued storage. The Chemical Demilitarization Program supports the international initiatives to rid the world of chemical weapons, as outlined in the Chemical Weapons Convention (CWC).

The Chemical Demilitarization Program is this nation's response to the mandate of public law and commitments under the CWC. The program is established by and subject to the provisions outlined in Title 50 United States Code (U.S.C.) Section 1521, which mandates that the U.S. chemical weapons stockpile must be destroyed by the deadline established by the CWC and under no circumstances later than December 31, 2023.

The United States ratified the CWC on April 25, 1997. The CWC is an international treaty banning development, production, stockpiling and use of chemical weapons. Under the treaty, chemical weapons were to be destroyed by April 29, 2007, with a possible one-time extension until April 29, 2012. The Secretary of Defense notified Congress on April 10, 2006 that the U.S. would request an extension of the destruction deadline to April 29, 2012. The notification also stated that the U.S. would not achieve that milestone based on the current schedules, but that the Department of Defense would continue requesting resources needed to complete destruction as close to the 2012 deadline as practicable. A formal request for the

extension was presented to the Organization for the Prohibition of Chemical Weapons (OPCW), an international organization overseeing implantation of the CWC provisions, and approved in December 2006. All nations that are party to the CWC must comply with international law and are subject to a stringent inspection regime conducted by the OPCW. The Department's policy is to safely and efficiently destroy the U.S. lethal chemical stockpile as soon as possible.

The Chemical Demilitarization Program consists of two Acquisition Category 1D Major Defense Acquisition Programs (MDAP) - Chemical Demilitarization-U.S. Army Chemical Materials Activity (CMA) and Chemical Demilitarization-Assembled Chemical Weapons Alternatives (ACWA). The Defense Acquisition Executive is the milestone decision authority for both programs. The Army has responsibility for oversight and management of the CMA MDAP with the Director of the CMA as the delegated authority for execution of the Chemical Stockpile Emergency Preparedness Project (CSEPP) and the Recovered Chemical Warfare Material Program (RCWM-P). The Joint Program Executive Office - Chemical and Biological Defense (JPEO-CBD) has the delegated authority for execution of the Chemical Stockpile Elimination (CSE) Project. In accordance with U.S. law, the Office of the Secretary of Defense (OSD) has direct oversight and management of the ACWA Program, which is responsible for neutralization destruction facilities in Colorado and Kentucky.

The Chemical Stockpile Elimination (CSE) Project: The CSE Project was responsible for the safe and environmentally sound destruction of the United States unitary chemical stockpiles originally located at one site outside the continental United States (OCONUS) known as Johnston Atoll Chemical Agent Disposal System, six continental United States (CONUS) sites (at Aberdeen, Maryland; Newport, Indiana; Pine Bluff, Arkansas; Anniston, Alabama; Umatilla, Oregon; and Tooele, Utah), and the Chemical Agent Munitions Destruction System (CAMDS) located in Tooele, Utah. These sites have now completed destruction of their stockpiles totaling 89.75 percent of the U.S. chemical weapons stockpile, facility closure, and closure of their respective operating permits.

The Recovered Chemical Warfare Material (RCWM) Program Support Functions: The RCWM Program Support Functions provide technical expertise, project management and maintain the crews and equipment required for the assessment of munitions with an unknown liquid fill and the destruction of those munitions that are determined to be RCWM (non-stockpile chemical munitions) in a safe, environmentally sound, and cost effective manner. The Support

Functions are a critical aspect of DoD's RCWM Program that investigates and remediates sites within the United States that are known or suspected to contain chemical munitions. Major RCWM Program Support Functions include: responding to explosives or munitions emergencies that involved munitions and certain materials of interest (i.e., when recovered, includes munitions that contain an unknown liquid fill; certain materials, such as laboratory vials, closed cavity containers encountered at a CWM site, that contain an unknown liquid fill; and chemical agent identification sets); developing and implementing transportation, characterization, and destruction equipment and procedures for munitions and certain materials of interest; supporting ratified treaties; providing for the ex-gratia destruction of eight WWII-era U.S. origin chemical munitions located on San Jose Island, Republic of Panama; providing the destruction of environmentally sensitive and contaminated material not covered by the CWC within the United States; and developing and implementing schedule and cost estimates associated with assessing and destroying RCWM. Transportation support provided by the RCWM Program includes: planning and documentation required to move munitions and certain materials of interest, RCWM or research material to support an assessment, secure storage, destruction efforts, and research and development efforts. Transport of RCWM is done in accordance with 50 U.S.C 1511-1521 and generally includes coordination with local, state, and federal officials. The RCWM Program Support Functions coordinates transportation activities through the U.S. Army 20th Support Command.

The Chemical Stockpile Emergency Preparedness Project (CSEPP): The CSEPP is a complementary effort to the Chemical Stockpile Elimination Project and the Assembled Chemical Weapons Alternatives Program to enhance protection of the civilian population during storage and destruction of the U.S. chemical weapons stockpile. CSEPP operations and requirements at the Alabama, Arkansas, Maryland, Indiana, Oregon and Utah locations have been completed with the elimination of the stockpiles at these sites. The U.S. Army and the Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) provide enhanced emergency preparedness and response capabilities to the communities surrounding the two remaining storage sites (Colorado and Kentucky), and jointly manage the CSEPP activities. DHS/FEMA has total responsibility and accountability for working with State and local governments to enhance the required off-post emergency preparedness within established resources. The Army manages on-post emergency response/preparedness and provides technical support for both onpost and off-post emergency preparedness. An Integrated Process Team (IPT) concept is the primary management tool used by the Army, DHS/FEMA, State, and local governments to address interjurisdictional issues and meet requirements of Public Law 99-145 for maximum protection to the general public.

The Assembled Chemical Weapons Alternatives (ACWA) Program: The Omnibus Consolidated Appropriation Act for FY 1997 (Public Law 104-208) directed that the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)), conduct a program to identify and demonstrate not fewer than two alternatives to the baseline incineration process for the demilitarization of assembled chemical munitions. In 2002, Public Law 107-248 assigned the Program Manager (PM) ACWA the responsibility for the destruction of the chemical weapons stockpiles at the Pueblo Chemical Depot in Colorado and the Blue Grass Army Depot in Kentucky. In June 2011, DoD certified a restructured ACWA program pursuant to 10 U.S.C 2433a. In February 2012, the Program Manager position was changed to a Program Executive Officer position. In March 2012, the ACWA program received Milestone B approval and an approved Acquisition Program Baseline that reflects revised cost and schedule estimates. The restructured ACWA program and the PEO's estimates underlying the restructured program are the basis for the program milestones and funding requirements reflected in this document. In July 2012, permanent orders were signed to re-designate the U.S. Army Element, ACWA to the Program Executive Office (PEO), ACWA effective October 1, 2012.

In March 2015, the ACWA program commenced destruction of the remaining 10.25 percent of the U.S chemical weapons stockpile. On February 11, 2016, using the Pueblo Chemical agent-Destruction Pilot Plant (PCAPP) Explosive Destruction System (EDS) in Colorado, 560 problematic munitions composed of projectiles, mortars, and Department of Transportation bottles containing 1.91 U.S. tons of mustard-chemical agent were destroyed. On September 7, 2016, the PCAPP main destruction facility commenced destruction operations.

#### Part II - Justification of Funds Required

The funds requested in this budget submission are required to carry out the Congressional mandate of 50 U.S.C 1521 and support the commitments of this nation under the CWC. This document provides justification for FY 2018 financial requirements in support of the Chemical Demilitarization Program, which is budgeted in the Chemical Agents and Munitions Destruction, Defense appropriation. The following paragraphs provide a top level summary of the activities planned for FY 2018 that require funding.

Recovered Chemical Warfare Material (RCWM) Program Support Functions in support of the United States Chemical Demilitarization Program will include the following items: provide crew sustainment, training, support to explosive and munitions emergencies, and planned response capabilities for the assessment, destruction, and disposal of RCWM. In addition, the Program will maintain an overarching research program for the evaluation and demonstration of process chemistries and emerging technologies for explosives and munitions emergency response support. Recovered Chemical Warfare Material (RCWM) Program Support Functions are also available to support, on a reimbursable basis, the Assembled Chemical Weapons Alternatives (ACWA) program and Secretary of Defense approved support to Combatant Commands and the Department of State.

The Chemical Stockpile Emergency Preparedness Project (CSEPP) will continue to support chemical stockpile emergency preparedness activities on the Pueblo, CO and Blue Grass, KY depots and in the off-post communities surrounding those facilities where chemical weapons stockpiles are stored.

The Assembled Chemical Weapons Alternatives (ACWA) program activities at the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) will include: continuation of main plant operations, completion of the second campaign of Explosive Destruction System (EDS) operations, and disposal of energetics at Anniston Static Detonation Chamber (SDC). The ACWA program activities at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will include: continuation of main plant systemization. BGCAPP SDC has been realigned to better support main plant systemization.

#### Part III - Milestones

### Major Milestones for the Recovered Chemical Warfare Material Program Support Functions are as follows:

#### Operations:

Time Critical Assessment and Destruction Support Activities	July 2009 to FY 2023
Planned Responses and Other Activities:	
Planning, Assessment and Destruction Operations, at Pine	
Bluff Arsenal, Arkansas, and Redstone Arsenal, Alabama	January 2012 to FY 2023
Destruction operations at Tooele Army Depot, Utah	June 2016 to Oct 2016
Destruction of eight OPCW identified WWII-era U.S. origin	FY 2017-2018
chemical munitions located on San Jose Island, Republic of Panama	

#### Major Milestones for the Chemical Stockpile Emergency Preparedness Project are as follows:

Provide response capabilities up to 180 days after completion of demilitarization operations at:

Pueblo Chemical Depot, Colorado	FY	2020
Blue Grass Chemical Activity, Kentucky	FY	2023

### Major Milestones for the Assembled Chemical Weapons Alternatives Program are as follows: PCAPP:

- Main Plant: Continue Agent Operations to Destroy	FY 2018
HD-Filled 155mm Projectiles	
- Main Plant: Continue destruction of Energetics at Anniston SDC	FY 2018
- Explosive Destruction System (EDS): Complete Second EDS campaign	2Q FY 2018 to 4Q FY 2018

#### **BGCAPP**:

- Main Plant: Continue Systemization FY 2018

(In !	Thousands	of Dollars)
FY 2018 Estim	ate	\$104,237
FY 2017 Amen	ided	\$147,282
FY 2016 Act	ual	\$118,198

#### Purpose and Scope

This budget activity provides for the management, technical and operational support required for assessment and destruction of munitions and certain materials of interest under DoD's Recovered Chemical Warfare Material (RCWM) Program, and emergency preparedness activities under the Chemical Stockpile Emergency Preparedness Project (CSEPP).

#### Justification of Funds Required

Funds requested in FY 2018 are necessary to maintain support to the Chemical Demilitarization Program. Operations financed by this budget activity in FY 2018 include: requirements for the provision of the Recovered Chemical Warfare Material (RCWM) Program Support Functions in support of explosives and munitions emergencies, planned RCWM response capabilities, and maintenance and logistics support for RCWM mobile systems and supporting equipment. The FY 2018 Chemical Stockpile Emergency Preparedness Project (CSEPP) budget request supports enhanced emergency preparedness and response capabilities at the State and local levels of government, and at the remaining two operational chemical stockpile storage installations (Colorado and Kentucky).

In addition, \$15 million of Funded Reimbursable Authority is needed to respond to requests by other government agencies and foreign countries for assistance in the storage, assessment and destruction of chemical agents and munitions.

#### Justification by Program

#### Recovered Chemical Warfare Material (RCWM) Program Support Functions:

<u>Program Management</u>: The FY 2018 budget request will fund personnel; base support; other support and contractual costs which include travel, transportation, materials and supplies, training, equipment rentals; matrix labor support from U.S. Army Research, Development and Engineering Command; labor support for the RCWM Integration Office; and CMA Headquarters management and oversight of the demilitarization and disposal of U.S. recovered chemical warfare material in support of the U.S. Chemical Demilitarization Program.

<u>Support Activities</u>: The FY 2018 budget request will fund programmatic management integration activities by contractor government performers. The FY 2018 budget request will fund activities such as: procurement and contract evaluation support, information and knowledge management, program management, and public affairs.

Work Performed By: The Recovered Chemical Warfare Material Directorate is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization involved with the destruction of the non-stockpile chemical material. Primary contractors or government agencies executing RCWM projects are: Army Research, Development and Engineering Command (RDECOM), Edgewood, Maryland, 20th CBRNE Command (Chemical, Biological, Radiological, Nuclear, Explosives), Edgewood, Maryland, Tennessee Valley Authority (TVA), Muscle Shoals, Alabama, General Physics (GP), Columbia, Maryland, Sandia National Laboratory, Albuquerque, New Mexico; Idaho National Laboratory, Boise, Idaho; Leidos, Reston, Virginia and others."

Operations: The FY 2018 budget request will fund time-critical assessment and destruction capability which consists of Mobile Munitions Assessment System (MMAS) and Explosive Destruction System (EDS) crew sustainment and training; deployment of mobile systems in response to time critical and planned recoveries; maintenance and logistics support for mobile systems; assessment and destruction system product improvements; studies and evaluation; archive research; and planned response actions at RCWM site. The FY 2018 budget request also provides for the use of the Chemical Demilitarization Training Facility to support this on-going mission. FY 2018 planned remediation efforts include assessment support at Pine Bluff Arsenal, Arkansas, following completion of U.S. Army Corps of Engineers

(USACE) remediation efforts and monitor progress of on-going USACE non-intrusive and intrusive investigations at Redstone Arsenal, Alabama.

#### Chemical Stockpile Emergency Preparedness Project:

<u>On-Post Program Management</u>: The FY 2018 budget request will fund personnel, program support and oversight, travel, training, equipment, supplies and contract support.

<u>On-Post Mission</u>: The FY 2018 budget request will fund the following requirements: emergency planner/response personnel for the two chemical weapons stockpile storage installations; Army administration; on-post training and annual joint exercises; Army public education and awareness projects; technical planning support; and operations and maintenance of on-post alert and notification systems, data automation systems, communications systems, emergency operation centers, and emergency preparedness and response capabilities in Colorado and Kentucky. This budget request also provides funding for Army-managed technical support for sustaining both on-post and off-post emergency preparedness and response capabilities.

Off-post Mission: The FY 2018 budget request will fund the following requirements: emergency planner/response personnel for DHS/FEMA, Colorado and Kentucky State and local governments; DHS/FEMA, Colorado and Kentucky State and local administration; off-post training, local exercises, and annual joint exercises; DHS/FEMA, Colorado and Kentucky State and local public outreach/education projects; and operations and maintenance of off-post alert and notification systems, automation systems, communications systems, emergency operations centers, Joint Information Centers, coordinated plans, medical support capabilities, and protective action capabilities including emergency preparedness and response. This budget request also provides funding for DHS/FEMA managed technical support for off-post emergency preparedness and response capabilities, off-post protective actions projects, and joint on-post/off-post exercises.

### CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

Operation and Maintenance, Defense-Wide Summary (\$ in thousands)
Budget Activity (BA) 1: Chemical Agents and Munitions, Destruction, Defense
Exhibit OP-5

	FY 2016	Price	Program	FY 2017	Price	Program	FY 2018
	Actual	<u>Change</u>	Change	<b>Estimate</b>	Change	Change	<b>Estimate</b>
Chem Demil	118,198	2,233	26,851	147,282	2,332	-45,377	104,237

I. Description of Operations Financed: See Pages 8 - 10 of this document.

#### II. Force Structure Summary:

N/A

### CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

		FY 2017					
			Cong	ressional	Action	-	
	FY 2016	Budget				Current	FY 2018
A. BA Subactivities	Actual	Request	Amount	Percent	Appropriated	<b>Estimate</b>	Estimate
CSE	6,507	0	0	0.0	0	0	0
Anniston Chemical	0	0	0	0.0	0	0	0
Agent Disposal							
Facility							
CSE - Program	2,050	0	0	0.0	0	0	0
Management							
CSE - Support	3,645	0	0	0.0	0	0	0
Activities							
Pine Bluff Chemical	381	0	0	0.0	0	0	0
Agent Disposal							
Facility							
Tooele Chemical Agent	0	0	0	0.0	0	0	0
Disposal Facility							
Umatilla Chemical	431	0	0	0.0	0	0	0
Agent Disposal							
Facility							
CSEPP	50,743	49,533	0	0.0	0	49,533	49,401
CSEPP Off-Post Mission	29,454	29,165	0	0.0	0	29,165	28,356
CSEPP On-Post Mission	19,228	17,867	0	0.0	0	17,867	18,766
CSEPP On-Post Program	2,061	2,501	0	0.0	0	2,501	2,279
Management							
RCWM-P	60,948	97,749	0	0.0	0	97,749	54,836
RCWM-P Operations	48,558	56,187	0	0.0	0	56,187	42,031
RCWM-P Operations	0	30,000	0	0.0	0	30,000	0
Panama							
RCWM-P Program	6,749	6,631	O	0.0	0	6,631	7,765
Management							

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

	9-				-		
			Cong				
	FY 2016	Budget				Current	FY 2018
A. BA Subactivities	Actual	Request	Amount	Percent	Appropriated	<b>Estimate</b>	<b>Estimate</b>
RCWM-P Programmatic	5,641	4,931	0	0.0	0	4,931	5,040
Support Activities							
Total	118,198	147,282	0	0.0	0	147,282	104,237

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

		Change	Change
в.	Reconciliation Summary		FY 2017/FY 2018
	Baseline Funding	147,282	147,282
	Congressional Adjustments (Distributed)		
	Congressional Adjustments (Undistributed)		
	Adjustments to Meet Congressional Intent		
	Congressional Adjustments (General Provisions)		
	Subtotal Appropriated Amount	147,282	
	Fact-of-Life Changes (2017 to 2017 Only)		
	Subtotal Baseline Funding	147,282	
	Supplemental		
	Reprogrammings		
	Price Changes		2,332
	Functional Transfers		
	Program Changes		-45,377
	Current Estimate	147,282	104,237
	Less: Wartime Supplemental		
	Normalized Current Estimate	147,282	

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

C. Reconciliation of Increases and Decreases FY 2017 President's Budget Request (Amended, if applicable)  1. Congressional Adjustments a. Distributed Adjustments b. Undistributed Adjustments c. Adjustments to Meet Congressional Intent	<u>Totals</u> 147,282
<ul> <li>d. General Provisions</li> <li>FY 2017 Appropriated Amount</li> <li>2. War-Related and Disaster Supplemental Appropriations</li> </ul>	147,282
3. Fact-of-Life Changes FY 2017 Baseline Funding	147,282
4. Reprogrammings (Requiring 1415 Actions)  Revised FY 2017 Estimate  5. Less: Item 2, War-Related and Disaster Supplemental	147,282
Appropriations and Item 4, Reprogrammings  FY 2017 Normalized Current Estimate  6. Price Change	147,282 2,332
7. Functional Transfers 8. Program Increases a. Annualization of New FY 2017 Program	1,558
<ul> <li>b. One-Time FY 2018 Increases</li> <li>c. Program Growth in FY 2018</li> <li>1) RCWM-P Program Management</li> <li>Increase due to additional staffing, management and</li> </ul>	
oversight. (FY 2017 Baseline: \$6,631 thousand) 2) CSEPP On-Post - Mission 544 Increase due to higher Army contract and Other Government Agency support costs.	

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

C. Reconciliation of Increases and Decreases	Amount	<u>Totals</u>
(FY 2017 Baseline: \$17,867 thousand)		
3) RCWM-P Programmatic Support Activities	11	
Increase due to minor contract adjustments. (FY 2017		
Baseline: \$4,931 thousand)		
9. Program Decreases		-46,935
a. Annualization of FY 2017 Program Decreases		
b. One-Time FY 2017 Increases		
c. Program Decreases in FY 2018		
1) RCWM-Panama	-30,000	
Decrease due to one time request of FY17 funds		
(programmed as a two year appropriation) to complete		
the destruction of the chemical munitions located on		
San Jose Island, Republic of Panama.		
(FY 2017 Baseline: \$30,000 thousand)		
2) RCWM-P Operations	-15,274	
Decrease due to completion of CWM destruction		
operations at Tooele Army Depot, Utah in FY2017,		
planned completion of assessment support at Pine		
Bluff Arsenal, Arkansas, and efficiencies gained in		
consolidation of contracts.		
(FY 2017 Baseline: \$56,187 thousand)		
3) CSEPP Off-Post - Mission	-1,389	
Decrease due to reduction in Commonwealth of	_,	
Kentucky O&M costs and reduction in FEMA technical		
support costs.		
(FY 2017 Baseline: \$29,165 thousand)		
4) CSEPP On-Post - Program Management	-272	
Decrease due to reduction in major support command	-212	
costs.		
CUBCB.		

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

C. Reconciliation of Increases and Decreases	<u>Amount</u>	<u>Totals</u>
(FY 2017 Baseline: \$2,501 thousand)		
FY 2018 Budget Request		104,237

CHEMICAL DEMILITARIZATION
Operation and Maintenance, Defense-Wide
Fiscal Year (FY) 2018 Budget Estimates

#### IV. Performance Criteria and Evaluation Summary:

Workload data not applicable.

### CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

V. Personnel Summary	FY 2016	FY 2017	FY 2018	Change FY 2016/ FY 2017	Change FY 2017/ FY 2018
Civilian End Strength (Total)	<u>51</u>	<u>0</u>	<u>0</u>	<u>-51</u>	<u></u> 0
U.S. Direct Hire	51	0	0	-51	0
Total Direct Hire	51	0	0	-51	0

FY17 Civilian End Strength decrease due to CSE mission completion resulting in Army internal reorganization to the table of distribution and allowance.

## CHEMICAL DEMILITARIZATION Operation and Maintenance, Defense-Wide Fiscal Year (FY) 2018 Budget Estimates

VI. OP 32 Line Items as Applicable (Dollars in thousands):

-		Chan	ge		Chan	ge	
	FY 2016	FY 2016/E	Y 2017	FY 2017	FY 2017/I	Y 2018	FY 2018
OP 32 Line	Actual	Price	Program	Estimate	Price	Program	<b>Estimate</b>
101 Exec, Gen'l & Spec Scheds	9,500	179	1,038	10,717	209	٥	10,926
121 PCS Benefits	126	0	-126	១	C·	۵	0
199 Total Civ Compensation	9,626	179	912	10,717	209	0	10,926
308 Travel of Persons	478	9	-94	393	9	٥	401
399 Total Travel	478	9	-94	393	8	0	401
601 Army Industrial Operations	409	C	-23	386	0	۵	386
699 Total DWCF Purchases	409	0	-23	386	0	0	386
771 Commercial Transport	26	©.	-26	٥	0	٥	0
799 Total Transportation	26	0	-26	0	0	0	0
912 Rental Payments to GSA (SLUC)	9	٥	-9	٥	0	۵	٥
914 Purchased Communications (Non-Fund)	32	1	-9	24	0	٥	24
915 Rents (Non-GSA)	15	0	-15	٥	C	٥	٥
920 Supplies & Materials (Non- Fund)	333	6	-236	103	2	۵	105
921 Printing & Reproduction	0	0	1	1	0	٥	1
922 Equipment Maintenance By Contract	539	10	-549	٥	0	٥	٥
925 Equipment Purchases (Non- Fund)	375	7	-65	317	6	٥	323
930 Other Depot Maintenance (Non- Fund)	O	C	49	49	1	Ð	50
932 Mgt Prof Support Svcs	13,847	263	5,092	19,202	384	-3,596	15,990
934 Engineering & Tech Svcs	5,862	111	4,019	9,991	200	955	11,146
962 Other Costs (Undistributed)	0	0	30,000	30,000	C	-30,000	0
987 Other Intra-Govt Purch	74,399	1,414	-7,194	68,619	1,372	-12,736	57,255
989 Other Services	12,214	232	-4,966	7,480	150	٥	7,630
990 IT Contract Support Services	34	1	-35	٥	0	٥	0
999 Total Other Purchases	107,659	2,045	26,082	135,786	2,115	-45,377	92,524
Total	118,198	2,233	26,851	147,282	2,332	-45,377	104,237

### Budget Activity 2: Research, Development, Test & Evaluation

FY 2018 Estimate	\$839,414
FY 2017 Amended	\$515,609
FY 2016 Actual	\$579,342

# Purpose and Scope

This budget activity provides resources for the development and testing of technologies for the destruction of chemical munitions that are alternatives to the baseline incineration program, and the design, acquisition and testing of prototype equipment for the recovery and treatment of recovered chemical warfare material.

### Justification of Funds Required

Funds are required for the Recovered Chemical Warfare Material (RCWM) Program Support Functions in FY 2018, in support of the United States Chemical Demilitarization Program, to continue Explosive Destruction System (EDS) process improvements, decontamination studies, monitoring support, treatability studies, researching alternative treatment technologies, universal munitions storage container (UMSC) development and, Portable Isotopic Neutron Spectroscopy (PINS) and Digital Radiography and Computed Tomography (DRCT) studies. Funds are also required for the Assembled Chemical Weapons Alternatives (ACWA) program in FY 2018 for activities at the Pueblo Chemical Agent Destruction Pilot Plant (PCAPP) and the Blue Grass Chemical Agent Destruction Pilot Plant (BGCAPP). The ACWA program activities at the PCAPP will include: continuation of main plant operations, completion of the second campaign of EDS operations, and disposal of energetics at Anniston Static Detonation Chamber (SDC). The ACWA program activities at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will include continuation of main plant systemization. BGCAPP SDC has been realigned to better support main plant systemization.

In addition, \$10 million of Funded Reimbursable Authority is required for evaluation and assessment of chemical warfare material discovered as a result of requests by other government agencies and foreign countries.

Funded Financial Summary			
(In Thousands of Dollars)			
	FY 2016	FY 2017	FY 2018
	Actual	Amended	Estimate
Chemical Materials Activity (CMA)			
RCWM-P Mobile Destruction Capabilities	6,913	5,863	6,029
RCWM-P Miscellaneous Studies and Projects	3,090	1,854	1,485
Subtotal CMA	10,003	7,717	7,514
Assembled Chemical Weapons Alternative Program			
Program Management	27,339	28,200	29,000
Pueblo, CO	323,000	302,492	397,300
Blue Grass, KY	219,000	177,200	405,600
Subtotal ACWA	569,339	507,892	831,900
Total Funded	579,342	515,609	839,414

### Justification by Program

#### A. DESCRIPTION OF ELEMENT:

Recovered Chemical Warfare Material (RCWM) Project: This budget activity will fund the development of improved technologies in support of the United States Chemical Demilitarization Program, for researching alternative treatment technologies, secondary waste treatment partnering with industry; research efforts on multi-agent chemical monitoring, decontamination methods and treatment studies; Explosive Destruction System (EDS) studies; design, study and testing efforts for new system(s) capable of high speed/high RCWM treatment and treating chemical agent contaminated soil and debris; Portable Isotopic Neutron Spectroscopy (PINS) and Digital Radiography and Computed Tomography (DRCT) studies to provide improved assessment capabilities.

Assembled Chemical Weapons Alternatives (ACWA) Program: This budget activity will fund costs related to design, construction, systemization, operations, and closure of two full-scale pilot plants, PCAPP and BGCAPP, as well as the Explosive Destruction System (EDS) and the Static Detonation Chamber (SDC). The budget activity also provides for the preparation of the necessary environmental documentation to support construction and operation of the two pilot plants, the EDS, the SDC, as well as public outreach and other program management activities. Costs for design and construction of pilot plants, the EDS, and the SDC are included in the Chemical Demilitarization Construction, Defense account.

### B. PROGRAM ACCOMPLISHMENTS AND PLANS:

# Recovered Chemical Warfare Material (RCWM) Program Support Functions (See Exhibit R-2a, Chemical Materials Agency):

<u>Program-Wide:</u> FY 2018 budget request will fund continued EDS process improvements, vapor monitoring, decontamination studies, monitoring support, researching alternative treatment technologies, UMSC development, and PINS and DRCT studies.

# Assembled Chemical Weapons Alternatives Program (See Exhibit R-2, ACWA):

<u>Program Management</u>: FY 2018 budget request will fund the ACWA Program Office salaries, supplies, equipment, travel, training, and mission and administrative support from contractors and other Government agencies. Also, the budget request includes funding for directed studies and support costs at the Office of the Secretary of Defense for oversight and management of the ACWA Program.

PCAPP: FY 2018 budget request will fund continuation of main plant operations, completion of the second campaign of EDS operations, host installation support, contract management, and project support services by support contractors and other government agencies.

BGCAPP: FY 2018 budget request will fund continuation of main plant systemization. BGCAPP SDC has been realigned to better support main plant systemization. Additionally, a portion of the FY 2018 budget request funds host installation support, contract management, and project support services by support contractors and other government agencies.

## C. WORK PERFORMED BY:

Recovered Chemical Warfare Material (RCWM) Program Support Functions: The Recovered Chemical Warfare Material Directorate is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization involved with the assessment of munitions and certain material of interest and the destruction of RCWM. Primary contractors or government agencies executing the provisions of RCWM Program Support Functions are: Sandia National Laboratory, Albuquerque, New Mexico; Idaho National Laboratory, Boise, Idaho; Chicago Bridge & Iron,

Boston, Massachusetts; U.S. Army Research, Development and Engineering Command (RDECOM), Edgewood, Maryland; and others.

Assembled Chemical Weapons Alternatives Program: The Program Executive Office for the Assembled Chemical Weapons Alternatives is located at Aberdeen Proving Ground, Maryland, and is the government's management organization involved with the implementation of alternatives to the baseline incineration process for the demilitarization of chemical munitions. A contract to design, build, test, operate, and close a pilot plant based on neutralization followed by bio-treatment at Pueblo Chemical Depot, Colorado was awarded to Bechtel National Incorporated in 2002. A contract to design, build, test, operate, and close a pilot plant based on neutralization followed by supercritical water oxidation at Blue Grass Army Depot, Kentucky was awarded to the Bechtel Parsons Joint Venture in 2003.

### D. RELATED ACTIVITIES:

No unnecessary duplication of effort will occur within the Department of Defense (DoD) or the Army. Large-scale destruction of toxic chemical agents and munitions is solely the responsibility of DoD. The U.S. Army is the Executive Agent for the Chemical Demilitarization Program, except for the Pueblo Chemical Depot, Colorado and Blue Grass Army Depot, Kentucky projects that are managed directly by the Office of the Secretary of Defense.

### E. OTHER APPROPRIATION FUNDS:

Recovered Chemical Warfare Material (RCWM) Program Support Functions: Operations and Maintenance FY 2018 funds in the Chemical Agents and Munitions Destruction, Defense appropriation will be used to maintain and operate mobile systems, and support emergencies and planned RCWM responses and other activities for the U.S. Chemical Demilitarization Program.

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# Chemical Demilitarization Program • Program/Budget Review Submission FY 2018 • RDT&E Program Exhibit R-1

(Listing by Budget Activity, then Program Element Number)

**BA# 02: RDT&E** 

### Cost (\$ in Millions)

Line#	BA#	PE#	PE Title	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
1	02	0708081D	Chemical Materials Agency	1,388.175	10.003	7.717	7.514	3#3	7.514
2	02	0708083D	ACWA - Assembled Chemical Weapons Alternatives	4,619.300	569.339	507.892	831.900	5 <del>*</del> 5	831.900
Total: RDT&E				6,007.475	579.342	515.609	839.414		839.414

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Exhibit R-2, RDT&E Budget Ite	l Demilitaria	zation Progr	am				Date: May	2017				
Appropriation/Budget Activity 0390D: Chem Agents & Munition		n I BA 2: RL	DT&E		R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Agency							
COST (\$ in Millions)	Prior Years (+)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	1,388.175	10.003	7.717	7.514		7.514	2.000	0.000	0.000	7.934	Continuing	Continuing
0708081D - 1: Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities	400.315	6.913	5.863	6.029	•	6.029	2.000	0.000	0.000	6.434	Continuing	Continuing
0708081D - 2: Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects	89.023	3.090	1.854	1.485	-	1.485	0.000	0.000	0.000	1.500	Continuing	Continuing

The sum of all Prior Years is \$898.837 million less than the represented total due to several projects ending

#### Note

Total Program Element (PE) Prior Years Cost includes RDT&E costs for the following projects whose RDT&E requirements have been completed: Chemical Stockpile Elimination Program (887.834) completed in FY05 and Chemical Stockpile Emergency Preparedness Program (1.429) completed in FY02.

### A. Mission Description and Budget Item Justification

The Chemical Demilitarization Program - U.S. Army Chemical Materials Activity (CMA) is a Category 1D Major Defense Acquisition Program (MDAP). The Army has oversight and management with the Director of the CMA as the delegated authority for execution of the Chemical Stockpile Emergency Preparedness Project (CSEPP) and the Recovered Chemical Warfare Material Program (RCWM-P).

The RCWM Program, in support of the U.S. Chemical Demilitarization Program, provides centralized technical expertise and project management of non-stockpile chemical material disposal in a safe, environmentally sound, and cost effective manner.

The CSEPP is a complementary effort to the Chemical Stockpile Elimination Program to enhance protection of the civilian population during storage and destruction of the U.S.' chemical weapons stockpile.

PE 0708081D: Chemical Materials Agency Chemical Demilitarization Program UNCLASSIFIED

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# UNCLASSIFIED

xhibit R-2, RDT&E Budget Item Justification: FY 2018 Chem	nical Demilitariza	ation Program		Date:	May 2017
ppropriation/Budget Activity 390D: Chem Agents & Munitions Destruction I BA 2: RDT&E		PE 0708081D /	ement (Number/Name) Chemical Materials Agen		19 19
. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	10.003	7.717	7.514	*	7.514
Current President's Budget	10.003	7.717	7.514		7.514
Total Adjustments	0.000	0.000	0.000	¥	0.000
<ul> <li>Congressional General Reductions</li> </ul>	*	((*)			
<ul> <li>Congressional Directed Reductions</li> </ul>	*	1072			
<ul> <li>Congressional Rescissions</li> </ul>	8	18			
<ul> <li>Congressional Adds</li> </ul>		946			
<ul> <li>Congressional Directed Transfers</li> </ul>	*	3.50			
Reprogrammings	•	9.0			
SBIR/STTR Transfer		·			

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 C	chemical De	militarizatio	n Program					Date: May	2017	
COSI (S in Millione)					R-1 Program Element (Number/Name) PE 0708081D I Chemical Materials Agency				Project (Number/Name) 0708081D - 1   Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities			
COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
0708081D - 1: Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities	400.315	6.913	5.863	6.029		6.029	2.000	0.000	0.000	6.434	Continuing	Continuing

### A. Mission Description and Budget Item Justification

This project includes costs for Explosive Destruction System (EDS) process improvements; testing efforts for new system(s) capable of high speed/high RCWM treatment and treating chemical agent contaminated soil and debris; Portable Isotopic Neutron Spectroscopy (PINS) and Digital Radiography and Computed Tomography (DRCT) analyses to provide improved assessment capabilities. Funds are required in FY2018 to continue EDS process improvement, PINS and DRCT analyses, and technology studies and testing.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Recovered Chemical Warfare Material Program - Mobile Destruction Capabilities	6.913	5.863	6.029
FY 2016 Accomplishments: Continued EDS process improvements, multi-agent gas analysis, shape charge studies, PINS and DRCT analyses, and technology studies and testing. Conducted EDS P2A and UMSC testing. Initiated high speed/high capacity system testing to treat RCWM, awarded and began testing technologies capable of treating chemical agent contaminated soil and debris.			
FY 2017 Plans: Continue EDS process improvements, multi-agent gas analysis, shape charge studies, PINS and DRCT analyses and technology studies and testing. Complete high speed/high capacity system testing to treat RCWM, complete testing technologies capable of treating chemical agent contaminated soil and debris.	-		
FY 2018 Plans: Continue EDS process Improvements, multi-agent gas analysis, shape charge studies, PINS and DRCT analyses and technology studies and testing.			
Accomplishments/Planned Programs Subtotals	6.913	5.863	6.029

PE 0708081D: Chemical Materials Agency Chemical Demilitarization Program UNCLASSIFIED

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### UNCLASSIFIED

Exhibit R-2A, RDT&E Project Jus	stification: FY	2018 Chemi	ical Demilitar	ization Prog	ram				Date: May 2017
Appropriation/Budget Activity 0390D / 2					rogram Eler 08081D / Ch		er/Name) erials Agency	07080811 Warfare I	Number/Name) O - 1 I Recovered Chemical Material (RCWM) Program - Mobile on Capabilities
C. Other Program Funding Summ	nary (\$ in Milli	ons)							1-110-
			FY 2018	FY 2018	FY 2018				Cost To
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022 Complete Total Cost
• 0390 O&M/0708081D:	46.617	58.891	33.395		33.395	30.514	7.389	3.501	51.899 Continuing Continuing
CAMD,D O&M									
• 0390 PROC/0708081D:	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	1.840 Continuing Continuing
CAMD,D PROC									g

### Remarks

### D. Acquisition Strategy

N/A

### E. Performance Metrics

The DOD uses the percent (cumulative from CWC entry into force) of treaty-declared category 1 chemical weapons destroyed as a performance measure for the Chemical Demilitarization (Chem Demil) Program. The program has developed annual destruction goals to guide its progress toward destroying the entire U.S. chemical weapons stockpile.

PE 0708081D: Chemical Materials Agency Chemical Demilitarization Program UNCLASSIFIED

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				UIT	CLASSII	-120						
Exhibit R-2A, RDT&E Project Ju	stification	FY 2018 C	Chemical De	emilitarization	on Program	1				Date: Mag	2017	
Appropriation/Budget Activity 0390D / 2	COST (\$ in Millions)  Prior Years FY 2016 PY 2017 PY 2018 PY 2019 PY 2								Warfare M	- 2 I Reco aterial (RC	me) vered Chem WM) Progra s and Projec	ım -
COST (\$ in Millions)	///	FY 2016	FY 2017	540			FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
0708081D - 2: Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects	89.023	3.090	1.854	1.485		1.485	0.000	0.000	0.000	1.500	) Continuing	Continuin
This project includes costs for reschemical monitoring, decontamin methods and continue alternative	searching al ation metho assessmen	ternative treated and treated to the terms of the terms o	eatment tec atment studi tudy and de	es. Funds					chemical n	nonitoring a	and deconta	mination
B. Accomplishments/Planned P									FY	<b>2016</b> 3.090	FY 2017	FY 2018 1.48
Title: Recovered Chemical Warfa FY 2016 Accomplishments: Continued research on chemical raccuracy study. FY 2017 Plans: Continue research efforts on chemical raccuracy study and design.	monitoring a	and deconta	amination m	ethods; tre	atment stud	dies; and cor	•			5.050	1.854	1.40
FY 2018 Plans:												
Continue research efforts on chen study and design.	nical monito	oring and de	econtamina(	tion method	ds and cont	inue alternat	tive assessr	ment metho	ds			
					Accompli	shments/PI	anned Prog	grams Sub	totals	3.090	1.854	1.48
C. Other Program Funding Sum	many (\$ in	Millions)								(4)		
C. Other Frogram Funding Sum	mary 13 m	minions	EY 2	2018 FY	2018 F	Y 2018					Cost To	
<u>Line Item</u> • 0390 O&M/0708081D: CAMD,D O&M	FY 20 20.8		017 <u>E</u>	3ase .440	<u>oco</u>	Total F	<b>Y 2019 I</b> 19.759	4.891	FY 2021 2.334		Complete Continuing	
Remarks												

PE 0708081D: Chemical Materials Agency Chemical Demilitarization Program UNCLASSIFIED

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### UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justit	fication: FY 2018 Chemical Demilit	tarization Program	Date: May 2017
Appropriation/Budget Activity 0390D / 2		R-1 Program Element (Number/Name) PE 0708081D I Chemical Materials Agency	Project (Number/Name) 0708081D - 2 I Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects
D. Acquisition Strategy N/A			
E. Performance Metrics The DOD uses the percent (cumulati Chemical Demilitarization (Chem De weapons stockpile.	ive from CWC entry into force) of tro mil) Program. The program has de	eaty-declared category 1 chemical weapons destroy eveloped annual destruction goals to guide its progre	red as a performance measure for the ess toward destroying the entire U.S. chemic
	¥.		

#### **UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item	n Justificat	ion: FY 201	18 Chemica	l Demilitariz	zation Progr	am				Date: May	2017	
Appropriation/Budget Activity 0390D: Chem Agents & Munitions	ions Destruction I BA 2: RDT&E PE 0708083D I ACWA - Assembled Chemical Weapons Alternatives											
COST (\$ in Millions)							Cost To Complete	Total Cost				
Total Program Element	4,619.300	569.339	507.892	831.900		831.900	886.900	930.700	809.900	687.500	Continuing	Continuing
0: 070: ACWA - Assembled Chemical Weapons Alternatives	4,619.300	569.339	507.892	831,900	140	831.900	886.900	930.700	809.900	687.500	Continuing	Continuing

#### Note

Project articles are U.S. tons of agent destroyed. Total ACWA Program quantity is 3,136 tons.

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

The Assembled Chemical Weapons Alternatives (ACWA) Program is a Category 1D Major Defense Acquisition Program responsible for destroying that portion of the U.S. inventory of lethal chemical agents and munitions stored at the Pueblo Chemical Depot in Colorado and the Blue Grass Army Depot in Kentucky. The ACWA Program is part of the Chemical Demilitarization Program, which is a congressionally-mandated program. The Chemical Demilitarization Program supports the international initiatives to rid the world of chemical weapons, as enunciated in the Chemical Weapons Convention (CWC). Consistent with Public Law 104-208 (the Omnibus Consolidated Appropriation Act for FY 1997), the Office of the Secretary of Defense has direct oversight of the ACWA Program. In 2002, Public Law 107-248 assigned the Program Manager (PM) ACWA the responsibility for the destruction of the chemical weapons stockpiles at the Pueblo Chemical Depot in Colorado and the Blue Grass Army Depot in Kentucky. In June 2011, DoD certified a restructured ACWA program pursuant to section 2433a of title 10, United States Code. In March 2012, the ACWA program received Milestone B approval and an approved Acquisition Program Baseline that reflects revised cost and schedule estimates. The restructured ACWA program and the Program Executive Office (PEO) estimates underlying the restructured program are the basis for the program milestones and funding requirements reflected in this document. In October 2012, PM ACWA was redesignated to a PEO.

Funds are required for the ACWA Program in FY 2018 to support the activities at the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) in Colorado and the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) in Kentucky. The activities at PCAPP will include continuation of main plant operations, completion of the second campaign of the Explosive Destruction System (EDS), and disposal of energetics at Anniston SDC. The ACWA program activities at BGCAPP will include continuation of main plant systemization. BGCAPP Static Detonation Chamber (SDC) has been realigned to better support main plant systemization. The SDC will be used to destroy the mustard munitions at BGCAPP.

### UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Chem	ical Demilitar	zation Program			Date: M	lay 2017	
Appropriation/Budget Activity 0390D: Chem Agents & Munitions Destruction I BA 2: RDT&E			ement (Number/Name) ACWA - Assembled Che	mical Wea <sub>l</sub>	oons Alternati	ves	
B. Program Change Summary (\$ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 201	8 OCO	FY 2018 7	<u> Total</u>
Previous President's Budget	569.339	380.892	750.700			750	.700
Current President's Budget	569.339	507.892	831.900		<b>:</b>	831	.900
Total Adjustments	0.000	127.000	81.200		· •	81	.200
<ul> <li>Congressional General Reductions</li> </ul>	//E:	20.					
<ul> <li>Congressional Directed Reductions</li> </ul>	-						
<ul> <li>Congressional Rescissions</li> </ul>	16	: <b>:</b> €					
Congressional Adds	150						
<ul> <li>Congressional Directed Transfers</li> </ul>	12	-					
<ul> <li>Reprogrammings</li> </ul>	(6)						
<ul> <li>SBIR/STTR Transfer</li> </ul>	15						
<ul> <li>Program Increase to Achieve Balance</li> </ul>	-	127.000	81.200		*	81	.200
C. Accomplishments/Planned Programs (\$ in Millions)				1	FY 2016	FY 2017	FY 2018
Title: The Assembled Chemical Weapons Alternatives (ACWA) F	Program				569.339	507.892	831.900
The activities in FY 2016 at PCAPP included: completion of main completion of the initial campaign of EDS operations. The activities in FY 2016 at BGCAPP included: continuation of main activities in FY 2017 at PCAPP will include: continuation of main for destroying munitions that cannot be processed at the main plate activities in FY 2017 at BGCAPP will include: continuation of the activities in FY 2017 at BGCAPP will include: continuation of	ain plant syst nain plant ope ant.	emization and con	tinuation of SDC constru				
FY 2018 Plans: The activities in FY 2018 at PCAPP wlll include: continuation of noperations, and disposal of energetics at Anniston SDC. The activities in FY 2018 at BGCAPP will include: continuation of		,	n of the second campaig	n of EDS			
		Accomplishmen	ts/Planned Programs \$	Subtotals	569.339	507.892	831.900
D. Other Program Funding Summary (\$ in Millions) N/A Remarks							

PE 0708083D: ACWA - Assembled Chemical Weapons Altern... Chemical Demilitarization Program UNCLASSIFIED

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#### **UNCLASSIFIED**

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Chemical Demilitaria	zation Program	Date: May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	
0390D: Chem Agents & Munitions Destruction I BA 2: RDT&E	PE 0708083D I ACWA - Assembled Chemical Weapons	Alternatives

#### E. Acquisition Strategy

The Assembled Chemical Weapons Alternatives (ACWA) Program is overseen by a program executive office, the PEO, Assembled Chemical Weapons Alternatives (ACWA), headquartered at the Edgewood area of Aberdeen Proving Ground, Maryland. The program is primarily executed through systems contracts to design, construct, test, and operate main plants. The main plants will use first-of-a-kind (FOAK) disassembly equipment and neutralization destruction technology for the chemical agent and the munition body followed by on-site treatment of the neutralization by-product using biotreatment at Pueblo and supercritical water oxidation (SCWO) at Blue Grass.

Two systems contracts, i.e., one per site, were competitively awarded to: Bechtel National Incorporated in 2002 for Pueblo Chemical Depot, Colorado, and to Bechtel Parsons Blue Grass (a Joint Venture) in 2003 for Blue Grass Army Depot, Kentucky. These contracts were originally awarded as indefinite delivery / indefinite quantity (IDIQ) task order contracts. However, due to program delays after award of these contracts and the ten-year ordering period for IDIQ contracts, the systems contracts were restructured to life-cycle service contracts to remove the IDIQ provisions, cover the balance of the work to be performed, and retain the multi-year authorization of the National Defense Authorization Act for FY 2007. Restructuring of the systems contracts was briefed to and endorsed by the Director, Defense Procurement and Acquisition Policy in 2008, and effected in 2009. The systems contracts are cost reimbursable type (CPAF) contracts.

#### F. Performance Metrics

The DoD uses the percentage of treaty-declared category 1 chemical weapons destroyed per year of operations, as a performance measure for the Chemical Demilitarization Program. This measure applies to the ACWA Program when destruction operations begin.

(In Thousands of Dollars)
FY 2018 Estimate \$18,081
Amended FY 2017 Estimate \$15,132
FY 2016 Actual \$2,281

### Purpose and Scope

This budget activity provides for the procurement of all process and support equipment used in Chemical Stockpile Emergency Preparedness Project (CSEPP) equipment, and assessment, destruction, and neutralization capabilities, in support of the United States Chemical Demilitarization Program, to safely and effectively assess and destroy recovered chemical warfare material. It includes costs for design, acquisition, fabrication, and installation of equipment. Also included are costs for initial spare parts, freight, software, maintenance, and operations manuals relating to specific equipment and design changes during construction and installation.

### Justification of Funds Required

The FY 2018 budget request provides for acquisition of CSEPP alert and warning equipment for the Pueblo Chemical Depot and the Blue Grass Chemical Activity. It also provides for acquisition of CSEPP communications equipment for the Pueblo County, Colorado and alert notification system equipment for Estill and Madison Counties, Kentucky automation replacement equipment for Kentucky State and local jurisdictions, equipment for the Kentucky State emergency operations center, and communications equipment for Madison County, Kentucky.

Funded Financial Summary	7		
(In Thousands of Dollars	)		
	FY 2016	Amended FY 2017	FY 2018
	Actual	Estimate	Estimate
Chemical Demilitarization Equipment			
Recovered Chemical Warfare Material Program	0	0	0
Subtotal	0	0	0
CSEPP On-Post - Mission	0	0	1,294
CSEPP Off-Post - Mission	2,281	15,132	16,787
Subtotal	2,281	15,132	18,081
Total Funded	2,281	15,132	18,081

### Justification by Program

<u>Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post</u>: FY 2018 funds will be used by the Pueblo Chemical Depot and the Blue Grass Chemical Activity to replace Close Circuit video surveillance systems.

Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-Post: FY 2018 funds will be used by Pueblo County, Colorado for 911 Telephone Replacement and Wide Area Network replacement equipment. FY 2018 funds will also be used by the Commonwealth of Kentucky Department of Emergency Services to replace State and County automation equipment and Emergency Operations Center Uninterruptable Power Supply and Battery Systems equipment. FY 2018 funds will be used by Estill County, Kentucky to replace Alert Notification System equipment. FY 2018 funds will be used by Madison County, Kentucky to replace additional Advisory Alert Radio System equipment, and additional communications 800 MHz radio system equipment.

### **UNCLASSIFIED**

Exhibit P-40, Budget Line Item Justification: FY 2018 Chemical Demilitarization Program

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0390D: Chem Agents & Munitions Destruction / BA 03: Procurement / BSA 1:

0708081D / Chemical Demilitarization Equipment

Procurement

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A-Service Readf, B-Not Service Readf):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units In Each)		•3	(*)	*			(**)		+:	91		
Gross/Weapon System Cost (\$ in Millions)	2,473.577	2,281	15.132	18.081		18.081	3,391	0.368	2,458	1.840	0.888	2,518,016
Less PY Advance Procurement (\$ In Additions)	( )	143	3	9	•	8	<b>©</b>	9	*	3	•	3)
Net Procurement (P-1) (\$ in Millions)	2,473.577	2.281	15.132	18.081	30	18.081	3.391	0.368	2.458	1.840	0.888	2,518.016
Plus CY Advance Procurement (8 In Millions)		(⊕(			0•0		:•:					
Total Obligation Authority (\$ in Latitions)	2,473.577	2.281	15.132	18.081	858	18.081	3.391	0.368	2.458	1.840	0.888	2,518.016
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (8 in Antilons)	2	720	5		724		(4)	2		12		
Flyaway Unit Cost (\$ in Millions)		(€:	34	*:	1943		583		•	i.e		50
Gross/Weapon System Unit Cost (\$ in Millions)		593				*	(%)	*	182			-

#### Description:

This budget activity provides for the procurement of all process and support equipment used in the incineration disposal facilities for destroying the unitary chemical stockpile, equipment to support the closure of incineration facilities, Chemical Stockpile Emergency Preparedness Project (CSEPP) equipment, and assessment, destruction, and neutralization capabilities, in support of the United States Chemical Demilitarization Program, to safely and effectively assess and treat Recovered Chemical Warfare Materiel.

#### **UNCLASSIFIED**

Exhibit P-40, Budget Line Item Justification: FY 2018 Chemical Demilitarization Program

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

0390D: Chem Agents & Munitions Destruction / BA 03: Procurement / BSA 1:

0708081D / Chemical Demilitarization Equipment

Procurement

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A-Service Readf, B-Not Service Readf):

	Exhibits Schedule			Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Lige, Soperhin	Subexhibits CD		Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ 14)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (S M)	Quantity / Total Coat (Each) / (8 M)
P-40a	Various			- /2,473.577	± /2.281	- 715.132	⇒ / 18.081	* 7 ×	- / 18,081
P-40	Total Gross/Weapon System Cost			- 12,473.577	- /2.281	- /15.132	- / 18.081	- 1 -	- / 18.081
	Exhibits Schedule			FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Exhibit Type	Title* Subexhibit	B CD	MDAP/ MAIS Code	Quantity / Total Coet (Each) / (\$ M)	Quantity / Total Cost (Each) / (S M)	Guantity / Total Cost (Each) / (S.14)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (5 M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Various			- / 3.391		/ 2,458	- /1,840	- 70,883	- /2,518,016
P-40	Total Gross/Weapon System Cost			/3.391	- / 0.3G8	- /2.458	- /1,840	- / 0.858	- /2,518.016

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications. Title represents the P-40a Title when only the P-40a Summary/Total is shown. Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post: FY 2018 funds will be used by the Pueblo Chemical Depot and the Blue Grass Chemical Activity to replace Close Circuit video surveillance systems.

Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-Post: FY 2018 funds will be used by Pueblo County, Colorado for 911 Telephone Replacement and Wide Area Network replacement equipment. FY 2018 funds will also be used by the Commonwealth of Kentucky Department of Emergency Services to replace State and County automation equipment and Emergency Operations Center Uninterruptable Power Supply and Battery Systems equipment. FY 2018 funds will be used by Estill County, Kentucky to replace Alert Notification System equipment. FY 2018 funds will be used by Madison County, Kentucky to replace additional Advisory Alert Radio System equipment, and additional communications 800 MHz radio system equipment.

### **UNCLASSIFIED**

Exhibit P-40a,  Appropriation		_							Item Nu			LCUOTI I I	- grann		-	ate: Ma		ns Title:		
0390D / 03 / 1	/ Du	aye	ACTIVITY	r i Buaç	jet Sub	ACTIVITY.						ation Eq	u <mark>i</mark> pment			<b>ygreg</b> ai arious	ea iten	is iitle:		
	П		Р	rior Year	<b>'S</b>	FY 2016				FY 2017		F	r 2018 Ba	se	FY	/ 2018 OC	:0	FY 2018 Total		
Item Number / Title [DODIC]	ID	MDAP/ MAIB Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ 14)
acilities	100											1 40.00	(	1			10.00	(*)	10000	10-17
Topele Chemical Agent Disposal Facility			369	*	401.007	*	£(		æ	Œ	8	*	×	100	×					2
Umatilla Chemical Agent Disposal Facility			1.52		410.047	8/	2		3	<b></b>		ā	æ.	195	*	×	85	•	*	2-
Johnston Atol Chemical Agent Disposal System			190	ž.	66.928	Sil	11	9	2.	Care .	20	2	120	029	2	12	9	8	8	
Chemical Agent Munitions Disposal System			(345)		27.630	×	Del	-	s.	180	2	:	74	120		9	a	4	ž.	
Chemical Demilitarization Training Facility			8.69	•2	-24.885	2	(€)		٠	300	٠		).i		*	•	34		×	
Anniston Chemical Agent Disposal Facility			920		380.884	==	. •	8	*	12.0	ń		*	828	.5	*	Æ	190	8	
Pine Bluff Chemical Agent Disposal Facility				8	328.806	8		<u> </u>	3	3	*)			<b>.</b>	5.	¥	95	950		7.
PM-CSE Support Activities			ail	¥2	225.762	:	16	2	*	av.	20		(2	240	8	¥	3	100		9
Early Chemical Stockpile Disposal Program			a	¥	33.632	12	N#	-	÷	347	2.		%	220	27	Ŷ	<u>@</u>	*	8	:
Subroral: Facilities	_		- 81	- 3	1,889.581	- 5	1/2		÷	- 4	27		- 12	83	- 2		- 2		•	2
Other Programs					100			XX												
RCWM-P	П			141	73.168	- 2			2	- 3		•	- 3	- 60	- 1			- 3		
CSEPP				(6)	509.101	38	198	2.281		.3)	15.132			18.081	€.			(*)	*	18.08
Director, CMA Support Acavities				: (0).	1.727		(*)	*		3)	€.	*	(ě	1961	£	*	19.	(60)	*	
Subtotal: Other Program	5		.97	. 16	583.998	34	587	2.281	*	365	15.132	9.	3	18.081	- 2	¥	3	- 20	2	18.08
otat			•	- 4	2,473.577			2.281			15.132			18.081	2					18.08
				FY 2019			FY 2020			FY 2021			FY 2022		To	Complet	e	T	otal Cost	
Item Number / Title [DODIC]	ID CD	MDAP/ MAIB Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (# M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Facilities				V 1																
Topele Chemical Agent Disposal Facilité			2:				1.50	*:		33	(10)	2.			190	*:	9		•	401.00

### UNCLASSIFIED

Appropriation / Budget Activity / Budget Sub Activity:  0390D / 03 / 1  P-1 Line Item Number / Title:  0708081D / Chemical Demilitarization Equipment														<b>ggregat</b> arious						
				FY 2019		FY 202		)	FY 2021			FY 2022			T	To Complete		Total Cost		t
Item Number / Title [DODIC]	ED	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qity (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (3 M)	Unit Cost	Qty (Each)	Total Cost (\$ 14)
Umatilla Chemical Agent Disposal Facilité			53.1	147		12	49	2		12	Ugil	¥	1	:4	020	-	*	99	0.60	410.04
Johnston Atoll Chemical Agent Disposal System			(E)	(K)	×		)( <b>i</b> )	<b>2</b> 2	×	Ċ.	(SE)	æ	×	79	8.0	æ	*	34	8.43	56,92
Chemical Agent Munitions Disposal System				. 18			:2:		*	55	S <b>.</b>	*	*	3	:::	2		æ	883	27,63
Chemical Demittarization Training Facility				ě	8		•	8	8	18	9	ŧ	ÿ.	B	:01	ź		3		24,88
Anniston Chemical Agent Disposal Facility			91	143	2	×	260		*	14	26.	- 8	-	:	_ 363	20		s	<b>199</b>	380.68
Pine Bluff Chemical Agent Disposal Facility			19.1			*		•	*	э	:•:	٠			::•::	*	•	:-	300	328,80
PM-CSE Support Activities			3	00	3	*	(4)	100			:*:		*	:=	:e:	*	*		:00	225.76
Earl/ Chemical Stockpile Disposal Program			9	06			38.			У	(4)	-		*		*3		æ	<b>*</b>	33,63
Subtotal: Facilities	-			795			.90			9	798	*	*	- 14	7.85	*			7.83	1,889.58
Other Programs		4																		
RCWM-P				3.00			(3)	50		₩.	290	*		1.840	3.60	*				76.008
CSEPP			- %	24	3.391		31	0.368			2.458	20	¥.	- 2	31	2	0.688	7	50	561,700
Director, CMA Support Activities				:25		2.	2			æ	3.50	*	*	3.			*			1.72
Subtotal: Other Program	5			7.5	3.391	*	20	0.368	*		2.458	*:	*	1.840			0.888	:e	220	628.43
rotal .					3.391	*		0.368			2.458			1.840			0.686			2,518.010

Note: Subtotals or Totals in this Exhibit P-40a may not be exact or sum exactly, due to rounding.