

**FISCAL YEAR (FY) 2019  
BUDGET ESTIMATES**

**February 2018**



**CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE**

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UNCLASSIFIED

Department of the Army  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
Chem Agents & Munitions Destruction	650,726	520,169	520,169	127,000
Total Department of the Army	650,726	520,169	520,169	127,000

UNCLASSIFIED

Department of the Army  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
-----	-----	-----	-----	-----
Chem Agents & Munitions Destruction	127,000			
Total Department of the Army	127,000			

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Department of the Army  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation -----	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency** -----	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs -----	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency -----
Chem Agents & Munitions Destruction	647,169		647,169
Total Department of the Army	647,169		647,169

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Department of the Army  
FY 2019 President's Budget  
Exhibit P-1 FY 2019 President's Budget  
Total Obligational Authority  
(Dollars in Thousands)

02 Feb 2018

Appropriation -----	FY 2019 Base -----	FY 2019 OCO -----	FY 2019 Total -----
Chem Agents & Munitions Destruction	993,816		993,816
Total Department of the Army	993,816		993,816

## UNCLASSIFIED

Defense-Wide  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation: Chem Agents &amp; Munitions Destruction

Budget Activity	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
01. Operation And Maintenance	119,985	104,237	104,237	
02. Research, Development, Test, And Evaluation	515,609	839,414	839,414	
03. Procurement	15,132	18,081	18,081	
20. Undistributed		-441,563	-441,563	127,000
Total Chem Agents & Munitions Destruction	650,726	520,169	520,169	127,000

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Defense-Wide  
FY 2019 President's Budget  
Exhibit P-1 FY 2019 President's Budget  
Total Obligational Authority  
(Dollars in Thousands)

02 Feb 2018

Appropriation: Chem Agents & Munitions Destruction

Budget Activity	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
01. Operation And Maintenance				
02. Research, Development, Test, And Evaluation				
03. Procurement				
20. Undistributed	127,000			
Total Chem Agents & Munitions Destruction	127,000			

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Defense-Wide  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation: Chem Agents & Munitions Destruction

Budget Activity	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
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	-314,563		-314,563
Total Chem Agents & Munitions Destruction	647,169		647,169

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Defense-Wide  
FY 2019 President's Budget  
Exhibit P-1 FY 2019 President's Budget  
Total Obligational Authority  
(Dollars in Thousands)

02 Feb 2018

Appropriation: Chem Agents & Munitions Destruction

Budget Activity	FY 2019 Base	FY 2019 OCO	FY 2019 Total
01. Operation And Maintenance	105,997		105,997
02. Research, Development, Test, And Evaluation	886,728		886,728
03. Procurement	1,091		1,091
20. Undistributed			
Total Chem Agents & Munitions Destruction	993,816		993,816

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## UNCLASSIFIED

Defense-Wide  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation: 0390D Chem Agents &amp; Munitions Destruction

Line No	Item Nomenclature	Ident Code	FY 2017 (Base + OCO)		FY 2018 PB Request with CR Adj Base		FY 2018 Total PB Requests* with CR Adj Base		FY 2018 PB Request with CR Adj OCO		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
<u>Budget Activity 01: Operation And Maintenance</u>											
Operation & Maintenance											
1	Chem Demilitarization - O&M		119,985		104,237		104,237				U
Total Operation And Maintenance			119,985		104,237		104,237				
<u>Budget Activity 02: Research, Development, Test, And Evaluation</u>											
RDT&E											
2	Chem Demilitarization - RDT&E		515,609		839,414		839,414				U
Total Research, Development, Test, And Evaluation			515,609		839,414		839,414				
<u>Budget Activity 03: Procurement</u>											
Procurement											
3	Chem Demilitarization - Proc		15,132		18,081		18,081				U
Total Procurement			15,132		18,081		18,081				
<u>Budget Activity 20: Undistributed</u>											
Undistributed											
4	Adj to Match Continuing Resolution	A			-441,563		-441,563		127,000		U
Total Undistributed					-441,563		-441,563		127,000		
Total Chem Agents & Munitions Destruction			650,726		520,169		520,169		127,000		

P-119PB: FY 2019 President's Budget (Published Version), as of February 2, 2018 at 08:39:49

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Defense-Wide  
FY 2019 President's Budget  
Exhibit P-1 FY 2019 President's Budget  
Total Obligational Authority  
(Dollars in Thousands)

02 Feb 2018

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Item Nomenclature	Ident Code	FY 2018 Total PB Requests+ with CR Adj OCO		FY 2018 Emergency Requests**		FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs		FY 2018 Remaining Req Emergency		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Operation And Maintenance											
Operation & Maintenance											
1	Chem Demilitarization - O&M										U
Total Operation And Maintenance											
Budget Activity 02: Research, Development, Test, And Evaluation											
RDT&E											
2	Chem Demilitarization - RDT&E										U
Total Research, Development, Test, And Evaluation											
Budget Activity 03: Procurement											
Procurement											
3	Chem Demilitarization - Proc										U
Total Procurement											
Budget Activity 20: Undistributed											
Undistributed											
4	Adj to Match Continuing Resolution	A		127,000							U
Total Undistributed				127,000							
Total Chem Agents & Munitions Destruction				127,000							

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Defense-Wide  
 FY 2019 President's Budget  
 Exhibit P-1 FY 2019 President's Budget  
 Total Obligational Authority  
 (Dollars in Thousands)

02 Feb 2018

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Item Nomenclature	Ident Code	FY 2018 Total		FY 2018 Less Enacted		FY 2018 Remaining Req		S e c
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
Budget Activity 01: Operation And Maintenance									
-----									
Operation & Maintenance									
1	Chem Demilitarization - O&M			104,237				104,237	U
Total Operation And Maintenance				104,237				104,237	
Budget Activity 02: Research, Development, Test, And Evaluation									
-----									
RDT&E									
2	Chem Demilitarization - RDT&E			839,414				839,414	U
Total Research, Development, Test, And Evaluation				839,414				839,414	
Budget Activity 03: Procurement									
-----									
Procurement									
3	Chem Demilitarization - Proc			18,081				18,081	U
Total Procurement				18,081				18,081	
Budget Activity 20: Undistributed									
-----									
Undistributed									
4	Adj to Match Continuing Resolution	A		-314,563				-314,563	U
Total Undistributed				-314,563				-314,563	
Total Chem Agents & Munitions Destruction				647,169				647,169	

UNCLASSIFIED

Defense-Wide  
FY 2019 President's Budget  
Exhibit P-1 FY 2019 President's Budget  
Total Obligational Authority  
(Dollars in Thousands)

02 Feb 2018

Appropriation: 0390D Chem Agents & Munitions Destruction

Line No	Item Nomenclature	Ident Code	FY 2019 Base Quantity	FY 2019 Base Cost	FY 2019 OCO Quantity	FY 2019 OCO Cost	FY 2019 Total Quantity	FY 2019 Total Cost	Se c
Budget Activity 01: Operation And Maintenance									
Operation & Maintenance									
1	Chem Demilitarization - O&M			105,997				105,997	U
Total Operation And Maintenance				105,997				105,997	
Budget Activity 02: Research, Development, Test, And Evaluation									
RDT&E									
2	Chem Demilitarization - RDT&E			886,728				886,728	U
Total Research, Development, Test, And Evaluation				886,728				886,728	
Budget Activity 03: Procurement									
Procurement									
3	Chem Demilitarization - Proc			1,091				1,091	U
Total Procurement				1,091				1,091	
Budget Activity 20: Undistributed									
Undistributed									
4	Adj to Match Continuing Resolution	A							U
Total Undistributed									
Total Chem Agents & Munitions Destruction				993,816				993,816	

**FISCAL YEAR (FY) 2019 BUDGET ESTIMATES  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE**

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**CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE**

**APPROPRIATION LANGUAGE**

**Fiscal Year 2019**

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 weapons stockpile, \$993,816,000 of which:

(1) \$105,997,000 shall be for operations and maintenance, of which not less than \$52,735,000 shall be for the Chemical Stockpile Emergency Preparedness Program, consisting of \$21,600,000 for activities on military installations and \$31,135,000, to remain available until September 30, 2020 to assist State and local governments;

(2) \$886,728,000, to remain available until September 30, 2020, shall be for research, development, test and evaluation, of which \$880,283,000 shall be only for the Assembled Chemical Weapons Alternatives (ACWA) Program;

(3) \$1,091,000 to remain available until September 30, 2021, shall be for procurement for the Chemical Emergency Preparedness Program to assist State and local governments.

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

**APPROPRIATION JUSTIFICATION**

(In Thousands of Dollars)	
FY 2019 Estimate	\$993,816
FY 2018 Estimate	\$961,732
FY 2017 Actual	\$650,726

**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 (as amended), 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 implementation of the CWC provisions, and approved by OPCW 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 previously consisted 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 CMA MDAP is currently inactive as a result of completing destruction of the seven chemical weapons stockpiles. The Army has responsibility for oversight and management of CMA with the Director of the CMA as the delegated authority for execution of the Chemical Stockpile Emergency Preparedness Project (CSEPP), and for managing the Recovered Chemical Warfare Material (RCWM) Program Support Functions. Separately, the Assistant Secretary of the Army for Installations, Energy and the Environment is delegated by the Secretary of the Army to fulfill the Executive Agent responsibilities for the Recovered Chemical Warfare Material (RCWM) Program within the United States assigned by the DoD. The Chemical Demilitarization Program is responsible for ensuring the RCWM Support Functions are adequately funded in support of explosive and munitions emergencies within the United States. 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 support functions are a critical aspect to the execution of DoD's RCWM Program that include: sustainment and training of personnel; maintenance of equipment in a deployable state; support of explosives or munitions emergencies that involve munitions and certain materials of interest, assessing munitions and other materials of interest, and destroying RCWM; technical expertise, documentation development and project management; archive research of chemical warfare material sites; and Research, Development, Test and Evaluation (RDT&E) efforts to meet program requirements.

The RCWM Program Support Functions managed by the CMA's Recovered Chemical Material Directorate (RCMD) also includes transporting munitions and other material of interest; and RCWM or research material to support an assessment, secure storage, destruction efforts, and research and development efforts as necessary. 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 CMA's RCMD coordinates transportation activities through the U.S. Army 20<sup>th</sup> Support Command.

**The Chemical Stockpile Emergency Preparedness Project (CSEPP):** The CSEPP is a complementary effort to the Assembled Chemical Weapons Alternatives Program to enhance protection of the civilian population during storage and destruction of the U.S. chemical weapons stockpile in Colorado and Kentucky. 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 on-post 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 inter-jurisdictional issues and meet requirements of 50 U.S.C. 1521 for maximum protection for the general public and workers.

**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. As of 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. To date, the PCAPP main plant has destroyed 42,897 munitions for a total of 251 tons of mustard - chemical agent.

## 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 the commitments of this nation under the Chemical Weapons Convention (CWC). This document provides justification for FY 2019 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 2019 that require funding.

The Chemical Demilitarization Program will continue to support the Recovered Chemical Warfare Material (RCWM) Program by ensuring the RCWM Support Functions are adequately funded to support explosive and munitions emergencies with the United States including: the assessment of munitions and other materials of interest with an unknown liquid fill and the destruction of those munitions and materials that are determined to be RCWM.

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 the Explosive Destruction System (EDS), beginning of the third campaign of the EDS, and continuation of energetics destruction at Anniston SDC, and the implementation of measures to augment and accelerate the destruction of munitions at PCAPP and BGCAPP. The ACWA program activities at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will include: continuation of main plant systemization and efforts to systemize the BGCAPP SDC.

Part III - Milestones

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

Support of Explosives or Munitions Emergency Responses to munitions and certain materials of interest encountered within the United States including the assessment, packaging, transportation, storage and destruction  
July 2009 to FY 2027

**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  
Blue Grass Chemical Activity, Kentucky

FY 2022  
FY 2024

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

PCAPP:

- Main Plant: Continue Agent Operations to Destroy HD-Filled 155mm Projectiles  
FY 2019
- Main Plant: Continue destruction of Energetics at Anniston SDC  
FY 2019
- Explosive Destruction System (EDS): Complete Second EDS campaign  
3Q FY 2019
- Explosive Destruction System (EDS): Begin Third EDS campaign  
4Q FY 2019

**BGCAPP:**

- Main Plant: Continue Systemization FY 2019
- Main Plant: Continue Efforts to Systemize the BGCCAPP SDC FY 2019



**Budget Activity 1: Operations and Maintenance**

(In Thousands of Dollars)	
<b>FY 2019 Estimate</b>	<b>\$105,997</b>
<b>FY 2018 Estimate</b>	<b>\$104,237</b>
<b>FY 2017 Actual</b>	<b>\$119,985</b>

**Purpose and Scope**

This budget activity provides for functions performed in support of the 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 2019 are necessary to maintain support to the Chemical Demilitarization Program. Operations financed by this budget activity in FY 2019 include:

- (1) RCWM Program Support Function requirements in support of explosives and munitions emergency responses within the United States, and maintenance and logistics support for RCWM mobile systems and supporting equipment.
- (2) Chemical Stockpile Emergency Preparedness Project (CSEPP) support for 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, \$10 million of Funded Reimbursable Authority is needed to respond to requests by the Services; other government agencies; and foreign countries when authorized by the Secretary of Defense, for assistance in the storage, assessment and destruction of chemical agents and munitions.

## Budget Activity 1: Operations and Maintenance

### Justification by Program

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

The RCWM Program is redefining sub-activities from Program Management, Program Management Support Activities, and Operations to the following support functions:

**Sustainment of Personnel (formerly Program Management):** The FY 2019 budget request will fund the following personnel: RCMD office; matrix labor support from U.S. Army Research, Development and Engineering Command; RCWM Integration Office; and sustainment and training of Mobile Munitions Assessment System (MMAS) and Explosive Destruction System (EDS) crews.

**Maintenance of Equipment (formerly Operations):** The FY 2019 budget request will fund activities to ensure the RCWM Program assessment and destruction assets are maintained in a deployable condition. The FY 2019 budget request also provides for the use of the Chemical Demilitarization Training Facility to support this ongoing mission.

#### **Support to Explosives and Munitions Emergency Response (formerly Operations):**

The FY 2019 budget request will fund the capability to provide time-critical responses, packaging, assessments of munitions and certain material of interest, the destruction of RCWM within the United States; and the disposal of generated hazardous waste.

**Programmatics (formerly Program Support Activities):** The FY 2019 budget request will fund programmatic activities such as: procurement and contract evaluation support, knowledge management, program and public affairs activities, system test and evaluation, and CMA Headquarters management and oversight of the RCWM Program Support Functions.

**Archive Research (formerly Operations):** The FY 2019 budget request will fund research and analysis of historical records related to chemical weapons production, movement, testing, and disposal to provide critical site specific information.

**Work Performed By:** The CMA's Recovered Chemical Material Directorate is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization that maintains and

## **Budget Activity 1: Operations and Maintenance**

manages the provisions of the RCWM Program Support Functions. Primary Army activities that support RCMD in the provision of the RCWM Program Support Functions are: Army Research, Development and Engineering Command (RDECOM), Edgewood Chemical Biological Center (ECBC), Edgewood, Maryland; and the U.S. Army Forces Command, 20th Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Command, CBRNE Analytical and Remediation Activity (CARA), Edgewood, Maryland. Other government agencies and contractors that support RCMD include: the Tennessee Valley Authority (TVA), Muscle Shoals, Alabama; General Physics (GP), Columbia, Maryland; Sandia National Laboratory (SNL), Albuquerque, New Mexico; Idaho National Laboratory (INL), Boise, Idaho; Booz Allen Hamilton, McLean, Virginia; GSI Pacific, Boulder, Colorado; and CALIBRE Systems, Alexandria, Virginia.

### **Chemical Stockpile Emergency Preparedness Project:**

**On-Post Program Management:** The FY 2019 budget request will fund personnel, program support and oversight, travel, training, equipment, supplies and contract support.

**On-Post Mission:** The FY 2019 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 2019 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

**Budget Activity 1: Operations and Maintenance**

preparedness and response capabilities, off-post protective actions projects, and joint on-post/off-post exercises.

Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President's Budget

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

	FY 2017	Price	Program	FY 2018	Price	Program	FY 2019
	<u>Actuals</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>
Chem Demil	119,985	1,826	-17,574	104,237	1,719	41	105,997

I. Description of Operations Financed: See Pages 8 - 11 of this document.

II. Force Structure Summary:

N/A

Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President's Budget

III. Financial Summary (\$ in thousands)

A. BA Subactivities	FY 2018						
	FY 2017 Actuals	Budget Request	Congressional Action			Current Estimate	FY 2019 Estimate
			Amount	Percent	Appropriated		
CSEPP	52,033	49,401	0	0.0	0	49,401	52,735
CSEPP Off-Post Mission	29,165	28,356	0	0.0	0	28,356	31,135
CSEPP On-Post Mission	20,367	18,766	0	0.0	0	18,766	19,213
CSEPP On-Post Program Management	2,501	2,279	0	0.0	0	2,279	2,387
RCWM Program Support Functions	67,952	54,836	0	0.0	0	54,836	53,262
RCWM Program - Operations Panama	13,700	0	0	0.0	0	0	0
RCWM Program - Programmatic Support Activities	5,290	5,040	0	0.0	0	5,040	0
RCWM Program - <u>Programmatics</u>	0	0	0	0.0	0	0	9,705
RCWM Program - Support to Explosives or Munitions Emergency Response	0	0	0	0.0	0	0	15,020
RCWM Program - Sustainment of Personnel	0	0	0	0.0	0	0	15,065

Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President's Budget

III. Financial Summary (\$ in thousands)

	<u>FY 2017 Actuals</u>	<u>Budget Request</u>	<u>FY 2018</u>			<u>Current Estimate</u>	<u>FY 2019 Estimate</u>
			<u>Congressional Action</u>				
			<u>Amount</u>	<u>Percent</u>	<u>Appropriated</u>		
<b>A. BA Subactivities</b>							
RCWM Program - Archive Research	0	0	0	0.0	0	2,021	
RCWM Program - Maintenance of Equipment	0	0	0	0.0	0	11,451	
RCWM Program - Operations	42,251	42,030	0	0.0	0	0	
RCWM Program - Program Management	6,711	7,766	0	0.0	0	0	
<b>Total</b>	<b>119,985</b>	<b>104,237</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>105,997</b>	

**Budget Activity 1: Operations and Maintenance**

**CHEMICAL DEMILITARIZATION**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2019 President's Budget**

**III. Financial Summary (\$ in thousands)**

<b>B. <u>Reconciliation Summary</u></b>	<b>Change <u>FY 2018/FY 2018</u></b>	<b>Change <u>FY 2018/FY 2019</u></b>
<b>Baseline Funding</b>	<b>104,237</b>	<b>104,237</b>
Congressional Adjustments (Distributed)		
Congressional Adjustments (Undistributed)		
Adjustments to Meet Congressional Intent		
Congressional Adjustments (General Provisions)		
<b>Subtotal Appropriated Amount</b>	<b>104,237</b>	
Fact-of-Life Changes (2018 to 2018 Only)		
<b>Subtotal Baseline Funding</b>	<b>104,237</b>	
Supplemental		
Reprogrammings		
Price Changes		1,719
Functional Transfers		
Program Changes		41
<b>Current Estimate</b>	<b>104,237</b>	<b>105,997</b>
Less: Wartime Supplemental		
<b>Normalized Current Estimate</b>	<b>104,237</b>	



**Budget Activity 1: Operations and Maintenance**

**CHEMICAL DEMILITARIZATION**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2019 President's Budget**

**III. Financial Summary (\$ in thousands)**

	<u>Amount</u>	<u>Totals</u>
<b>C. <u>Reconciliation of Increases and Decreases</u></b>		
<b>FY 2018 President's Budget Request (Amended, if applicable)</b>		<b>104,237</b>
1. Congressional Adjustments		
a. Distributed Adjustments		
b. Undistributed Adjustments		
c. Adjustments to Meet Congressional Intent		
d. General Provisions		
<b>FY 2018 Appropriated Amount</b>		<b>104,237</b>
2. War-Related and Disaster Supplemental Appropriations		
3. Fact-of-Life Changes		
<b>FY 2018 Baseline Funding</b>		<b>104,237</b>
4. Reprogrammings (Requiring 1415 Actions)		
<b>Revised FY 2018 Estimate</b>		<b>104,237</b>
5. Less: Item 2, War-Related and Disaster Supplemental Appropriations and Item 4, Reprogrammings		
<b>FY 2018 Normalized Current Estimate</b>		<b>104,237</b>
6. Price Change		1,719
7. Functional Transfers		
8. Program Increases		54,877
a. Annualization of New FY 2018 Program		
b. One-Time FY 2019 Increases		
c. Program Growth in FY 2019		
1) RCWM Program - Sustainment of Personnel	14,813	
Minimal funding change from FY 2018 to FY 2019. The full increase is due to the RCWM Program Support Functions changing from the Program Management subactivity to better define the requirement. (FY 2018 Baseline: \$0 thousand)		

## Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President's Budget

### III. Financial Summary (\$ in thousands)

<u>C. Reconciliation of Increases and Decreases</u>	<u>Amount</u>	<u>Totals</u>
2) RCWM Program - Support to Explosives or Munitions Emergency Response Minimal funding change from FY 2018 to FY 2019. The full increase is due to the RCWM Program Support Functions changing from the Operations subactivity to this and two other subactivities (Maintenance of Equipment and Archives) to better define the requirement. (FY 2018 Baseline: \$0 thousand)	14,769	
3) RCWM Program - Maintenance of Equipment The full increase is due to the RCWM Program Support Functions changing from the Operations subactivity to this and two other subactivities (Support to Explosives or Munitions Emergency Response and Archives) to better define the requirement. (FY 2018 Baseline: \$0 thousand)	11,259	
4) RCWM Program - Programmatic The full increase is due to the RCWM Program Support Functions changing from the Program Support Activities subactivity to better define the requirement. (FY 2018 Baseline: \$0 thousand)	9,542	
5) CSEPP Off-Post - Mission Increase due to higher Commonwealth of Kentucky operating costs for communications and Emergency Operations Centers. (FY 2018 Baseline: \$28,356 thousand)	2,304	
6) RCWM Program - Archive Research Minimal funding change from FY 2018 to FY 2019. The full increase is due to the RCWM Program Support Functions changing from the Operations subactivity	1,987	

**Budget Activity 1: Operations and Maintenance**

**CHEMICAL DEMILITARIZATION**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2019 President's Budget**

**III. Financial Summary (\$ in thousands)**

<b>C. <u>Reconciliation of Increases and Decreases</u></b>	<b><u>Amount</u></b>	<b><u>Totals</u></b>
to this and two other subactivities (Maintenance of Equipment and Support to Explosive or Munitions Response) to better define the requirement. (FY 2018 Baseline: \$0 thousand)		
7) CSEPP On-Post - Mission Increase due to higher Army contract and other Government Agency support costs. (FY 2018 Baseline: \$18,766 thousand)	133	
8) CSEPP On-Post - Program Management Increase due to higher administrative costs for command support. (FY 2018 Baseline: \$2,279 thousand)	70	
9. Program Decreases		-54,836
a. Annualization of FY 2018 Program Decreases		
b. One-Time FY 2018 <del>Increases</del> Decreases		
c. Program Decreases in FY 2019		
1) RCWM Program - Operations Minimal funding change from FY 2018 to FY 2019. This subactivity reflects as a full decrease attributed to the RCWM Program Support Function changing from this subactivity to the Support to Explosives and Munitions Response, Maintenance of Equipment, and Archive Research subactivities to better define the requirements. (FY 2018 Baseline: \$42,031 thousand)	-42,030	
2) RCWM Program - Program Management Minimal funding change from FY 2018 to FY 2019. This subactivity reflects as a full decrease attributed to the RCWM Program Support Function changing from this subactivity to the Sustainment of	-7,766	

Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 President's Budget

III. Financial Summary (\$ in thousands)

<u>C. Reconciliation of Increases and Decreases</u>	<u>Amount</u>	<u>Totals</u>
Personnel subactivity to better define the requirement. (FY 2018 Baseline: \$7,766 thousand)		
3) RCWM Program - Programmatic Support Activities Minimal funding change from FY 2018 to FY 2019. This subactivity reflects as a full decrease attributed to the RCWM Program Support Function changing from this subactivity to the Programmatic subactivity to better define the requirement. (FY 2018 Baseline: \$5,038 thousand)	-5,040	
<b>FY 2019 Budget Request</b>		<b>105,997</b>

**Budget Activity 1: Operations and Maintenance**

**CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 Budget Estimates**

IV. Performance Criteria and Evaluation Summary:

Workload data not applicable.

**Budget Activity 1: Operations and Maintenance**

**CHEMICAL DEMILITARIZATION**  
**Operation and Maintenance, Defense-Wide**  
**Fiscal Year (FY) 2019 Budget Estimates**

**V. Personnel Summary**

Workload data not applicable.

Budget Activity 1: Operations and Maintenance

CHEMICAL DEMILITARIZATION  
Operation and Maintenance, Defense-Wide  
Fiscal Year (FY) 2019 Budget Estimates

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

OP 32 Line	FY 2017 Actuals	Change FY 2017/FY 2018		FY 2018 Estimate	Change FY 2018/FY 2019		FY 2019 Estimate
		Price	Program		Price	Program	
101 Exec, Gen'l & Spec Scheds	10,294	201	749	11,244	57	1,157	12,458
121 PCS Benefits	107	0	-107	0	0	0	0
<b>199 Total Civ Compensation</b>	<b>10,401</b>	<b>201</b>	<b>642</b>	<b>11,244</b>	<b>57</b>	<b>1,157</b>	<b>12,458</b>
308 Travel of Persons	333	6	116	455	8	1	464
<b>399 Total Travel</b>	<b>333</b>	<b>6</b>	<b>116</b>	<b>455</b>	<b>8</b>	<b>1</b>	<b>464</b>
601 Army Industrial Operations	327	0	58	385	-5	0	380
<b>699 Total DWCF Purchases</b>	<b>327</b>	<b>0</b>	<b>58</b>	<b>385</b>	<b>-5</b>	<b>0</b>	<b>380</b>
771 Commercial Transport	17	0	-11	6	0	0	6
<b>799 Total Transportation</b>	<b>17</b>	<b>0</b>	<b>-11</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
912 Rental Payments to GSA (SLUC)	15	0	-1	14	0	0	14
913 Purchased Utilities (Non-Fund)	5	0	-5	0	0	0	0
914 Purchased Communications (Non-Fund)	34	1	-4	31	1	0	32
920 Supplies & Materials (Non-Fund)	359	6	-70	295	5	1	301
922 Equipment Maintenance By Contract	952	16	-210	758	14	1	773
925 Equipment Purchases (Non-Fund)	125	2	320	447	8	11	466
932 Mgt Prof Support Svcs	14,516	247	974	15,737	283	1,747	17,767
933 Studies, Analysis & Eval	160	3	-163	0	0	0	0
934 Engineering & Tech Svcs	4,877	83	6,009	10,969	197	704	11,870
935 Training and Leadership Development	67	1	-68	0	0	0	0
957 Other Costs (Land and Structures)	1,093	19	-243	869	16	1	886
962 Other Costs (Undistributed)	13,700	0	-13,700	0	0	0	0
987 Other Intra-Govt Purch	61,194	1,040	-7,244	54,990	990	-3,798	52,182
989 Other Services	11,810	201	-3,974	8,037	145	216	8,398
<b>999 Total Other Purchases</b>	<b>108,907</b>	<b>1,619</b>	<b>-18,379</b>	<b>92,147</b>	<b>1,659</b>	<b>-1,117</b>	<b>92,689</b>
<b>Total</b>	<b>119,985</b>	<b>1,826</b>	<b>-17,574</b>	<b>104,237</b>	<b>1,719</b>	<b>41</b>	<b>105,997</b>

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

(In Thousands of Dollars)	
FY 2019 Estimate	\$886,728
FY 2018 Estimate	\$839,414
FY 2017 Actual	\$515,609

### 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 assessment and destruction (treatment) of recovered chemical warfare material (RCWM).

### Justification of Funds Required

Funds are required for RDT&E required by the RCWM Program Support Functions in FY 2019, in support of the United States Chemical Demilitarization Program. The RCWM Program Support Function activities include: continuation of Explosive Destruction System (EDS) process improvements; testing efforts for new systems capable of high-speed, high input treatment of RCWM; capable of treating chemical agent-contaminated soil and debris; developing improved assessment technology that allows for the rapid assessment of munitions and material of interest; improving the Portable Isotopic Neutron Spectroscopy (PINS) and Digital Radiography and Computed Tomography (DRCT) analyses to provide improved assessment capabilities; testing of alternative non-intrusive assessment technology; and improvements to the Transportable Detonation Chamber (TDC) analysis, re-design and testing, multi-agent gas analysis, and chemistry studies.

Funds are also required for the Assembled Chemical Weapons Alternatives (ACWA) program in FY 2019 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, start of third campaign of EDS operations, disposal of energetics at Anniston Static Detonation Chamber (SDC), and implementing measures required to augment



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

and accelerate the destruction of munitions at PCAPP and BGCAPP. The ACWA program activities at the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will include completion of systemization and start of main plant operations. BGCAPP SDC has been realigned to better support main plant systemization.

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

In addition, \$5 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.

<b>Funded Financial Summary</b>			
<b>(In Thousands of Dollars)</b>			
	<b>FY 2017 Actual</b>	<b>FY 2018 Estimate</b>	<b>FY 2019 Estimate</b>
<b>Chemical Materials Activity (CMA)</b>			
RCWM Program Mobile Destruction Capabilities	5,863	6,029	0
RCWM Program Miscellaneous Studies and Projects	1,854	1,485	0
RCWM Program Support Function RDT&E Projects	0	0	6,445
<b>Subtotal CMA</b>	<b>7,717</b>	<b>7,514</b>	<b>6,445</b>
<b>Assembled Chemical Weapons Alternative Program</b>			
Program Management	28,200	29,000	29,210
Pueblo, CO	302,492	397,300	391,800
Blue Grass, KY	177,200	405,600	459,273
<b>Subtotal ACWA</b>	<b>507,892</b>	<b>831,900</b>	<b>880,283</b>
<b>Total Funded</b>	<b>515,609</b>	<b>839,414</b>	<b>886,728</b>

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

### Justification by Program

#### A. DESCRIPTION OF ELEMENT:

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

The RCWM Program Support Function is redefining subactivities from Mobile Destruction Capabilities and Miscellaneous Studies and Projects to RDT&E projects. This budget activity will fund the RDT&E projects for the development of improved technologies in support of the United States Chemical Demilitarization Program, for Explosive Destruction System (EDS) process improvements; testing efforts for new systems capable of high speed, high input treatment of RCWM; capable of treating chemical agent contaminated soil and debris; developing improved assessment technology that allows for the rapid assessment of munitions and material of interest; improving the Portable Isotopic Neutron Spectroscopy (PINS) and Digital Radiography and Computed Tomography (DRCT) analyses to provide improved assessment capabilities, testing of alternative non-intrusive assessment technology, and improvements to the Transportable Detonation Chamber (TDC) analysis, re-design and testing, multi-agent gas analysis, and chemistry studies.

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), the Static Detonation Chamber (SDC), and implementing measures required to augment and further accelerate the destruction of munitions at PCAPP and BGCAPP. 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.

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

### B. PROGRAM ACCOMPLISHMENTS AND PLANS:

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

Program-Wide: FY 2019 budget request will fund continued EDS process improvements, multi-agent gas analysis, PINS and DRCT analyses, chemistry studies and complete testing of the TDC and alternative non-intrusive assessment technology.

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

Program Management: FY 2019 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 2019 budget request will fund continuation of main plant operations, completion of the second campaign of EDS operations, start of third campaign of EDS operations, continuation of energetics disposal at Anniston SDC, host installation support, contract management, and project support services by support contractors and other government agencies.

BGCAPP: FY 2019 budget request will fund continuation of main plant systemization and continuation of efforts to systemize the BGCAPP SDC. Additionally, a portion of the FY 2019 budget request funds host installation support, contract management, and project support services by support contractors and other government agencies.

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

### 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 DoD activities that support RCMD in the provision of the RCWM Program support functions are: Army Research, Development and Engineering Command (RDECOM), Edgewood Chemical Biological Center (ECBC), Edgewood, Maryland; and the U.S. Army Forces Command, 20th Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) Command, CBRNE Analytical and Remediation Activity (CARA), Edgewood, Maryland. Other government agencies and contractors that support RCMD include: General Physics (GP), Columbia, Maryland; Sandia National Laboratory (SNL), Albuquerque, New Mexico; Idaho National Laboratory (INL), Boise, Idaho; Booz Allen Hamilton, McLean, Virginia; and APTIM Federal Services, Alexandria, Virginia

### **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.

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

### **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 Recovered Chemical Warfare Material (RCWM) Program, which is responsible for the management and execution of actions involving chemical warfare material (CWM) recovered within and outside the United States.

### **E. OTHER APPROPRIATION FUNDS:**

**Recovered Chemical Warfare Material (RCWM) Program Support Functions:** Operations and Maintenance FY 2019 funds in the Chemical Agents and Munitions Destruction, Defense appropriation will be used in the support of the RCWM program for sustainment of personnel, maintenance of equipment and to respond, package, and assess munitions and certain materials of interest with an unknown liquid fill as part of support of explosives and munitions emergencies and CWM response actions.

Budget Activity 2: Research, Test, Development & Evaluation

**UNCLASSIFIED**

Chemical Demilitarization Program • Budget Estimate Submission FY 2019 • 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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
1	02	0708081D	Chemical Materials Activity	1,398.178	7.717	7.514	6.445	-	6.445
2	02	0708083D	ACWA - Assembled Chemical Weapons Alternatives	5,188.639	507.892	831.900	880.283	-	880.283
<b>Total: RDT&amp;E</b>				<b>6,586.817</b>	<b>515.609</b>	<b>839.414</b>	<b>886.728</b>	<b>-</b>	<b>886.728</b>

**UNCLASSIFIED**

Exhibit R-1

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Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Chemical Demilitarization Program											Date: February 2018	
Appropriation/Budget Activity 0390D: Chem Agents & Munitions Destruction I BA 2: RDT&E					R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity							
COST (\$ in Millions)	Prior Years (+)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	1,398.178	7.717	7.514	6.445	-	6.445	0.000	0.000	7.830	4.956	Continuing	Continuing
0708081D - 1: Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities	407.228	5.863	6.029	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	419.120
0708081D - 2: Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects	92.113	1.854	1.485	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	95.452
0708081D - 3: Recovered Chemical Warfare Material (RCWM) Program - RDT&E Projects	0.000	0.000	0.000	6.445	-	6.445	0.000	0.000	7.830	4.956	Continuing	Continuing

<sup>(+)</sup> 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 FY 2005 and Chemical Stockpile Emergency Preparedness Program (1.429) completed in FY 2002.

**A. Mission Description and Budget Item Justification**  
The Chemical Demilitarization Program - U.S. Army Chemical Materials Activity (CMA) was a Category 1D Major Defense Acquisition Program (MDAP); however, the CMA MDAP is currently inactive as a result of completing destruction of the seven chemical weapons stockpiles. 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 for managing the Recovered Chemical Warfare Material (RCWM) Program Support Functions.

The RCWM Program Support Functions, 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 Assembled Chemical Weapons Alternatives Program to enhance protection of the civilian population during storage and destruction of the U.S.' chemical weapons stockpile.



Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Chemical Demilitarization Program				Date: February 2018	
Appropriation/Budget Activity		R-1 Program Element (Number/Name)			
0390D: Chem Agents & Munitions Destruction / BA 2: RDT&E		PE 0708081D / Chemical Materials Activity			
<b>B. Program Change Summary (\$ in Millions)</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>
Previous President's Budget	7.717	7.514	6.995	-	6.995
Current President's Budget	7.717	7.514	6.445	-	6.445
Total Adjustments	0.000	0.000	-0.550	-	-0.550
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Economic/Inflation Adjustment	-	-	-0.550	-	-0.550

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018		
Appropriation/Budget Activity 0390D I 2					R-1 Program Element (Number/Name) PE 0708081D I Chemical Materials Activity				Project (Number/Name) 0708081D - 1 I Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
0708081D - 1: Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities	407.228	5.863	6.029	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	419.120
<b>A. Mission Description and Budget Item Justification</b>												
<p>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, Transportable Detonation Chamber (TDC) analysis, redesign and testing, and Universal Munition Storage Container (UMSC) testing.</p> <p>See Program Element 0708081D - 3 for FY 2019 funding requirements.</p>												
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> Recovered Chemical Warfare Material Program - Mobile Destruction Capabilities										5.863	6.029	0.000
<b>Description:</b> FY17 Accomplishments: Continued EDS process improvements, multi-agent gas analysis, PINS and DRCT analyses, shape charge studies, UMSC testing, and TDC redesign. Completed high speed/high capacity system testing to treat RCWM and testing of technologies to treat chemical agent contaminated soil and debris.												
<b>FY 2018 Plans:</b> Continue EDS process improvements, multi-agent gas analysis, PINS and DRCT analyses, shape charge studies, UMSC testing, and TDC functional testing.												
<b>FY 2019 Plans:</b> See Program Element 0708081D - 3 for FY 2019 funding plans.												
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Program Elements 0708081D - 1 and 0708081D - 2 are combined into one program element, 0708081D - 3, beginning in FY 2019.												
<b>Accomplishments/Planned Programs Subtotals</b>										5.863	6.029	0.000

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018	
Appropriation/Budget Activity 0390D / 2				R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity				Project (Number/Name) 0708081D - 1 / Recovered Chemical Warfare Material (RCWM) Program - Mobile Destruction Capabilities			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u> <u>Base</u>	<u>FY 2019</u> <u>OCO</u>	<u>FY 2019</u> <u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0390 O&M/0708081D: CAMD,D O&M	43.401	43.869	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	87.270
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> N/A											
<b>E. Performance Metrics</b> 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.											

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018		
Appropriation/Budget Activity 0390D / 2					R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity				Project (Number/Name) 0708081D - 2 / Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
0708081D - 2: Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects	92.113	1.854	1.485	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	95.452
<b>A. Mission Description and Budget Item Justification</b>												
This project includes costs for researching alternative treatment technologies, secondary waste treatment partnering with industry; research efforts on multi-agent chemical monitoring, decontamination methods and treatment studies.												
See Program Element 0708081D - 3 for FY 2019 funding requirements.												
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects										1.854	1.485	0.000
<b>Description:</b> FY 2017 Accomplishments: Awarded contract to test alternative non-intrusive assessment technology and continued chemistry studies.												
<b>FY 2018 Plans:</b> Prepare for testing of alternative non-intrusive assessment technology and continued chemistry studies.												
<b>FY 2019 Plans:</b> See Program Element 0708081D - 3 for FY 2019 funding plans.												
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Program Elements 0708081D - 1 and 0708081D - 2 are combined into one program element, 0708081D - 3, beginning in FY 2019.												
<b>Accomplishments/Planned Programs Subtotals</b>										1.854	1.485	0.000
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost	
• 0390 O&M/0708081D: CAMD,D O&M	24.551	10.967	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	35.518	

PE 0708081D: Chemical Materials Activity  
Chemical Demilitarization Program

UNCLASSIFIED

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018		
Appropriation/Budget Activity 0390D / 2				R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity				Project (Number/Name) 0708081D - 2 / Recovered Chemical Warfare Material (RCWM) Program - Miscellaneous Studies and Projects				
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
			<u>FY 2019</u>	<u>FY 2019</u>	<u>FY 2019</u>						<u>Cost To</u>	
	<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>Base</u>	<u>OCO</u>	<u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Complete</u>	<u>Total Cost</u>
<u>Remarks</u>												
<b>D. Acquisition Strategy</b>												
N/A												
<b>E. Performance Metrics</b>												
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.												

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018		
Appropriation/Budget Activity 0390D / 2					R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity				Project (Number/Name) 0708081D - 3 / Recovered Chemical Warfare Material (RCWM) Program - RDT&E Projects			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
0708081D - 3: Recovered Chemical Warfare Material (RCWM) Program - RDT&E Projects	0.000	0.000	0.000	6.445	-	6.445	0.000	0.000	7.830	4.956	Continuing	Continuing
<b>A. Mission Description and Budget Item Justification</b>												
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, testing of alternative non-intrusive assessment technology, Transportable Detonation Chamber (TDC) analysis, re-design and testing, multi-agent gas analysis, and chemistry studies.												
<b>B. Accomplishments/Planned Programs (\$ in Millions)</b>										<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>
<b>Title:</b> Recovered Chemical Warfare Material (RCWM) Program – RDT&E Projects										0.000	0.000	6.445
<b>Description:</b> FY 2017 Accomplishments: See Program Elements 0708081D - 1 and 0708081D - 2.												
<b>FY 2018 Plans:</b> See Program Elements 0708081D - 1 and 0708081D - 2.												
<b>FY 2019 Plans:</b> Continue EDS process improvements, multi-agent gas analysis, PINS and DRCT analyses, chemistry studies and complete testing of the TDC and alternative non-intrusive assessment technology.												
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Program Elements 0708081D - 1 and 0708081D - 2 are combined into one program element, 0708081D - 3, beginning in FY 2019.												
<b>Accomplishments/Planned Programs Subtotals</b>										0.000	0.000	6.445
<b>C. Other Program Funding Summary (\$ in Millions)</b>												
<b>Line Item</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>Cost To Complete</b>	<b>Total Cost</b>	
• 0390 O&M/0708081D:: CAMD,D O&M	0.000	0.000	53.262	0.000	53.262	11.797	1.209	61.656	51.874	Continuing	Continuing	

PE 0708081D: Chemical Materials Activity  
Chemical Demilitarization Program

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Budget Activity 2: Research, Test, Development & Evaluation

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Exhibit R-2A, RDT&E Project Justification: PB 2019 Chemical Demilitarization Program										Date: February 2018	
Appropriation/Budget Activity 0390D / 2				R-1 Program Element (Number/Name) PE 0708081D / Chemical Materials Activity				Project (Number/Name) 0708081D - 3 / Recovered Chemical Warfare Material (RCWM) Program - RDT&E Projects			
<b>C. Other Program Funding Summary (\$ in Millions)</b>											
<u>Line Item</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u> <u>Base</u>	<u>FY 2019</u> <u>OCO</u>	<u>FY 2019</u> <u>Total</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• 0390 PROC/0708081D:: CAMD,D PROC	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.824	0.000	Continuing	Continuing
<b>Remarks</b>											
<b>D. Acquisition Strategy</b> N/A											
<b>E. Performance Metrics</b> 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.											

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Chemical Demilitarization Program											Date: February 2018	
Appropriation/Budget Activity 0390D: Chem Agents & Munitions Destruction / BA 2: RDT&E					R-1 Program Element (Number/Name) PE 0708083D / ACWA - Assembled Chemical Weapons Alternatives							
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	-	507.892	831.900	880.283	-	880.283	922.511	841.074	688.617	721.594	Continuing	Continuing
070: ACWA - Assembled	-	507.892	831.900	880.283	-	880.283	922.511	841.074	688.617	721.594	Continuing	Continuing
<b>Note</b>												
Project articles are U.S.tons of agent destroyed. Total ACWA Program quantity is 3,136 tons.												
<b>A. Mission Description and Budget Item Justification</b>												
<p>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.</p> <p>Funds are required for the ACWA Program in FY 2019 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), beginning of the third campaign of the EDS, continuation of energetics destruction at Anniston SDC, and the implementation of measures to augment and accelerate the destruction of munitions at PCAPP and BGCAPP. The ACWA program activities at BGCAPP will include continuation of main plant systemization and continuation of efforts to systemize the BGCAPP SDC. The BGCAPP SDC will be used to destroy the mustard munitions at BGCAPP.</p>												



Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Chemical Demilitarization Program				Date: February 2018		
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				
<b>B. Program Change Summary (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>
Previous President's Budget		507.892	831.900	877.200	-	877.200
Current President's Budget		507.892	831.900	880.283	-	880.283
Total Adjustments		0.000	0.000	3.083	-	3.083
• Congressional General Reductions		-	-			
• Congressional Directed Reductions		-	-			
• Congressional Rescissions		-	-			
• Congressional Adds		-	-			
• Congressional Directed Transfers		-	-			
• Reprogrammings		-	-			
• SBIR/STTR Transfer		-	-			
• Economic Adjustment		-	-	3.083	-	3.083
<b>C. Accomplishments/Planned Programs (\$ in Millions)</b>		<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>		
<b>Title:</b> The Assembled Chemical Weapons Alternatives (ACWA) Program		507.892	831.900	880.283		
<b>Description:</b> FY 2017 Accomplishments The activities in FY 2017 at PCAPP included: continuation of main plant operations and maintenance of the EDS in preparation for destroying munitions that cannot be processed at the main plant. The activities in FY 2017 at BGCAPP included: continuation of main plant systemization.						
<b>FY 2018 Plans:</b> The activities in FY 2018 at PCAPP will include: continuation of main plant operations, continuation of the second campaign of EDS operations, and continuation of energetics destruction at Anniston SDC. The activities in FY 2018 at BGCAPP will include: continuation of main plant systemization.						
<b>FY 2019 Plans:</b> The activities in FY 2019 at PCAPP will include: continuation of main plant operations, completion of the second campaign of the Explosive Destruction System (EDS), beginning of the third campaign of the EDS, continuation of energetics destruction at Anniston SDC, and the implementation of measures to augment and accelerate the destruction of munitions at PCAPP and BGCAPP. The activities in FY 2019 at BGCAPP will include: continuation of main plant systemization and efforts to systemize the BGCAPP SDC.						
<b>FY 2018 to FY 2019 Increase/Decrease Statement:</b> Ramp-up of BGCAPP activities in support of main plant operations.						
<b>Accomplishments/Planned Programs Subtotals</b>		507.892	831.900	880.283		

Budget Activity 2: Research, Test, Development & Evaluation

UNCLASSIFIED

<b>Exhibit R-2, RDT&amp;E Budget Item Justification:</b> PB 2019 Chemical Demilitarization Program		<b>Date:</b> February 2018
<b>Appropriation/Budget Activity</b> 0390D: <i>Chem Agents &amp; Munitions Destruction I BA 2: RDT&amp;E</i>	<b>R-1 Program Element (Number/Name)</b> PE 0708083D / <i>ACWA - Assembled Chemical Weapons Alternatives</i>	
<b>D. Other Program Funding Summary (\$ in Millions)</b> N/A		
<b>Remarks</b>		
<b>E. Acquisition Strategy</b> <p>The ACWA Program is overseen by a program executive office, the PEO 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.</p> <p>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.</p>		
<b>F. Performance Metrics</b> <p>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.</p>		

**Budget Activity 3: Procurement**

	(In Thousands of Dollars)
FY 2019 Estimate	\$1,091
FY 2018 Estimate	\$18,081
FY 2017 Actual	\$15,132

**Purpose and Scope**

This budget activity provides for the procurement of process and support equipment to support Chemical Stockpile Emergency Preparedness Project (CSEPP) and RCWM Program Support Functions. In addition, it provides for the procurement of assessment, destruction, and neutralization equipment in support of the United States Chemical Demilitarization Program to safety 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 2019 budget request only provides for continued acquisition of CSEPP alert notification system equipment for Madison County, Kentucky.

**Budget Activity 3: Procurement**

Funded Financial Summary (In Thousands of Dollars)			
	FY 2017 Actual	FY 2018 Estimate	FY 2019 Estimate
<b>Chemical Demilitarization Equipment</b>			
Recovered Chemical Warfare Material Program	0	0	0
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>
CSEPP On-Post - Mission	0	1,294	0
CSEPP Off-Post - Mission	15,132	16,787	1,091
<b>Subtotal</b>	<b>15,132</b>	<b>18,081</b>	<b>1,091</b>
<b>Total Funded</b>	<b>15,132</b>	<b>18,081</b>	<b>1,091</b>

**Justification by Program**

**Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-Post:** FY 2019 funds will be used by Madison County, Kentucky, to continue replacement of Adviser Alert Radio System equipment and communication equipment.

Budget Activity 3: Procurement

UNCLASSIFIED

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2019 Chemical Demilitarization Program										<b>Date:</b> February 2018		
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0390D: Chem Agents & Munitions Destruction / BA 03: Procurement / BSA 1: Procurement							<b>P-1 Line Item Number / Title:</b> 0708081D / Chemical Demilitarization Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):				<b>Program Elements for Code B Items:</b> N/A				<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A												
<b>Resource Summary</b>	<b>Prior Years</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019 Base</b>	<b>FY 2019 OCO</b>	<b>FY 2019 Total</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>FY 2023</b>	<b>To Complete</b>	<b>Total</b>
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,475.858	15.132	18.081	1.091	-	1.091	1.982	2.362	1.824	0.694	2.400	2,519.424
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,475.858	15.132	18.081	1.091	-	1.091	1.982	2.362	1.824	0.694	2.400	2,519.424
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority (\$ in Millions)</b>	<b>2,475.858</b>	<b>15.132</b>	<b>18.081</b>	<b>1.091</b>	<b>-</b>	<b>1.091</b>	<b>1.982</b>	<b>2.362</b>	<b>1.824</b>	<b>0.694</b>	<b>2.400</b>	<b>2,519.424</b>
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
<b>Description:</b> 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.												

Budget Activity 3: Procurement

UNCLASSIFIED

<b>Exhibit P-40, Budget Line Item Justification:</b> PB 2019 Chemical Demilitarization Program							<b>Date:</b> February 2018			
<b>Appropriation / Budget Activity / Budget Sub Activity:</b> 0390D: Chem Agents & Munitions Destruction / BA 03: Procurement / BSA 1: Procurement					<b>P-1 Line Item Number / Title:</b> 0708081D / Chemical Demilitarization Equipment					
<b>ID Code</b> (A=Service Ready, B=Not Service Ready):			<b>Program Elements for Code B Items:</b> N/A			<b>Other Related Program Elements:</b> N/A				
<b>Line Item MDAP/MAIS Code:</b> N/A										
Exhibits Schedule					Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Various				- / 2,475.858	- / 15.132	- / 18.081	- / 1.091	- / -	- / 1.091
P-40	Total Gross/Weapon System Cost				- / 2,475.858	- / 15.132	- / 18.081	- / 1.091	- / -	- / 1.091
Exhibits Schedule					FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	Various				- / 1.982	- / 2.362	- / 1.824	- / 0.694	- / 2.400	- / 2,519.424
P-40	Total Gross/Weapon System Cost				- / 1.982	- / 2.362	- / 1.824	- / 0.694	- / 2.400	- / 2,519.424
*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.										
<b>Justification:</b> Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-Post: FY 2019 funds will be used by Madison County, Kentucky, to continue replacement of Adviser Alert Radio System equipment.										

Budget Activity 3: Procurement

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Chemical Demilitarization Program																Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity:						P-1 Line Item Number / Title:						Aggregated Items Title:								
0390D / 03 / 1						0708081D / Chemical Demilitarization Equipment						Various								
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<b>Other Programs</b>																				
001 / RCWM-P			-	-	73.168	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
002 / CSEPP			-	-	511.382	-	-	16.132	-	-	18.081	-	-	1.091	-	-	-	-	-	
003 / DIRECTOR, CMA SUPPORT ACTIVITIES			-	-	1.727	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Subtotal: Other Programs</b>			-	-	<b>586.277</b>	-	-	<b>15.132</b>	-	-	<b>18.081</b>	-	-	<b>1.091</b>	-	-	-	-	<b>1.091</b>	
<b>Facilities</b>																				
001 / TOOLE CHEMICAL AGENT DISPOSAL FACILITY			-	-	401.007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
002 / UNATILLA CHEMICAL AGENT DISPOSAL FACILITY			-	-	410.047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
003 / JOHNSTON ATOLL CHEMICAL AGENT DISPOSAL FACILITY			-	-	66.928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
004 / CHEMICAL AGENT MUNITIONS DISPOSAL SYSTEM			-	-	27.630	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
005 / CHEMICAL DEMILITARIZATION TRAINING FACILITY			-	-	24.886	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
006 / ANNISTON CHEMICAL AGENT DISPOSAL FACILITY			-	-	380.884	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
007 / PINE BLUFF CHEMICAL AGENT DISPOSAL FACILITY			-	-	328.806	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
008 / PM-CSE SUPPORT ACTIVITIES			-	-	226.762	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
009 / EARLY CHEMICAL STOCKPILE DISPOSAL PROGRAM			-	-	33.632	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Subtotal: Facilities</b>			-	-	<b>1,889.581</b>	-	-	-	-	-	<b>18.081</b>	-	-	<b>1.091</b>	-	-	-	-	<b>1.091</b>	
<b>Total</b>			-	-	<b>2,475.858</b>	-	-	<b>15.132</b>	-	-	<b>18.081</b>	-	-	<b>1.091</b>	-	-	-	-	<b>1.091</b>	
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2020			FY 2021			FY 2022			FY 2023			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
<b>Other Programs</b>																				

LI 0708081D - Chemical Demilitarization Equipment  
Chemical Demilitarization Program

UNCLASSIFIED

Budget Activity 3: Procurement

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Chemical Demilitarization Program															Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity:					P-1 Line Item Number / Title:										Aggregated Items Title:					
0390D / 03 / 1					0708081D / Chemical Demilitarization Equipment										Various					
Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	FY 2020			FY 2021			FY 2022			FY 2023			To Complete			Total Cost		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
001 / RCWM-P			-	-	-	-	-	-	-	-	1.824	-	-	-	-	-	1.900	-	-	76.892
002 / CSEPP			-	-	1.982	-	-	2.362	-	-	-	-	-	0.694	-	-	0.600	-	-	661.224
003 / DIRECTOR, CMA SUPPORT ACTIVITIES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.727
<b>Subtotal: Other Programs</b>			-	-	<b>1.982</b>	-	-	<b>2.362</b>	-	-	<b>1.824</b>	-	-	<b>0.694</b>	-	-	<b>2.400</b>	-	-	<b>628.843</b>
<b>Facilities</b>																				
001 / TOOELE CHEMICAL AGENT DISPOSAL FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	401.007
002 / UMATILLA CHEMICAL AGENT DISPOSAL FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	410.047
003 / JOHNSTON ATOLL CHEMICAL AGENT DISPOSAL FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66.928
004 / CHEMICAL AGENT MUNITIONS DISPOSAL SYSTEM			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27.630
005 / CHEMICAL DEMILITARIZATION TRAINING FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	24.885
006 / ANNISTON CHEMICAL AGENT DISPOSAL FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	380.884
007 / PINE BLUFF CHEMICAL AGENT DISPOSAL FACILITY			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	328.806
008 / PM-CSE SUPPORT ACTIVITIES			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226.762
009 / EARLY CHEMICAL STOCKPILE DISPOSAL PROGRAM			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33.632
<b>Subtotal: Facilities</b>			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>1,868.581</b>
<b>Total</b>			-	-	<b>1.982</b>	-	-	<b>2.362</b>	-	-	<b>1.824</b>	-	-	<b>0.694</b>	-	-	<b>2.400</b>	-	-	<b>2,519.424</b>

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