

# **FISCAL YEAR 2005 BUDGET ESTIMATE SUBMISSION**

**February 2004**



**CHEMICAL AGENTS AND MUNITIONS DESTRUCTION**

BUDGET ESTIMATE SUBMISSION FOR FY 2005  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION

<u>TABLE OF CONTENTS</u>	<u>PAGE NO</u>
APPROPRIATION LANGUAGE.....	1
APPROPRIATION JUSTIFICATION.....	2
PART I - PURPOSE AND SCOPE	
PART II - JUSTIFICATION OF FUNDS REQUIRED	
PART III - PROGRAM DESCRIPTIONS AND MILESTONES	
<b>BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE.....</b>	<b>19</b>
PURPOSE AND SCOPE	
JUSTIFICATION OF FUNDS REQUIRED	
FUNDED FINANCIAL SUMMARY	
JUSTIFICATION BY PROGRAM	
<b>BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT.....</b>	<b>30</b>
PURPOSE AND SCOPE	
JUSTIFICATION OF FUNDS REQUIRED	
FUNDED FINANCIAL SUMMARY	
JUSTIFICATION BY PROGRAM	

CHEMICAL AGENTS AND MUNITIONS DESTRUCTION

<u>TABLE OF CONTENTS (cont'd)</u>	<u>PAGE NO</u>
<b>BUDGET ACTIVITY 3: PROCUREMENT.....</b>	<b>40</b>
PURPOSE AND SCOPE	
JUSTIFICATION OF FUNDS REQUIRED	
FUNDED FINANCIAL SUMMARY	
JUSTIFICATION BY PROGRAM	
BUDGET ITEM JUSTIFICATION SHEET (EXHIBIT P-40)	
WEAPONS SYSTEM COST ANALYSIS (EXHIBIT P-5)	
BUDGET PROCUREMENT HISTORY AND PLANNING (EXHIBIT P-5A)	

**JUSTIFICATION OF FY 2005 BUDGET ESTIMATE SUBMISSION  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION**

**APPROPRIATION LANGUAGE**

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 National Defense Authorization Act, 1986 (50 U.S.C. 1521), and for the destruction of other chemical warfare materiel that are not in the chemical weapon stockpile, \$1,371,990,000 to become available on October 1, 2004 of which \$1,138,801,000 shall be for Operation and Maintenance, to remain available until September 30, 2006; \$154,209,000 shall be for Research and Development, to remain available until September 30, 2006; \$78,980,000 shall be for Procurement, to remain available until September 30, 2007.

**JUSTIFICATION OF FY 2005 BUDGET ESTIMATE SUBMISSION  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION**

**APPROPRIATION JUSTIFICATION**

(In Thousands of Dollars)

<b>FY 2005 Estimate</b>	<b>\$1,371,990</b>
<b>FY 2004 Budget</b>	<b>\$1,500,261</b>
<b>FY 2003 Actual</b>	<b>\$1,449,199</b>

**Part I – Purpose and Scope**

On 1 December 2003, the Chemical Materials Agency (CMA) was formally established with the mission for safe and secure storage of the chemical stockpile and to safely and quickly destroy all chemical warfare and related material, while ensuring maximum protection for the public, the personnel involved in the destruction effort, and the environment. 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 world. 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) materiel, 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 enunciated in the Chemical Weapons Convention (CWC).

The Chemical Demilitarization Program is based on Section 1412 of the National Defense Authorization Act for Fiscal Year 1986 (Public Law 99-145) which directs the Department of Defense to destroy the complete unitary chemical stockpile by September 30, 1994 or the date established by a U.S. ratified treaty banning the possession of chemical agents and munitions. Public Law 99-145 was subsequently amended by the National Defense Authorization Act for Fiscal Year 1989 (Public Law 100-456), the National Defense Authorization Act for Fiscal Year 1992 (Public Law 102-190), and the National Defense Authorization Act for Fiscal Year 1993 (Public Law 102-484), which extended program completion to April 30, 1997; July 31, 1999; and December 31, 2004, respectively.

The United States ratified the Chemical Weapons Convention (CWC) on April 25, 1997. The CWC is an international treaty banning development, production, stockpiling and use of chemical weapons. More specifically, each ratifying country is prohibited, under any circumstances, from: developing, producing, acquiring, retaining or transferring chemical weapons to anyone; using chemical weapons; engaging in any military preparations to use chemical weapons; and from assisting, encouraging or inducing, in any way, anyone engaging in any activity prohibited under the CWC. The CWC also requires each ratifying country possessing chemical weapons to destroy them in an environmentally safe manner. It specifically forbids the disposal of chemical weapons by open pit burning, land burial, or dumping in any body of water. Under the treaty, chemical weapons are to be destroyed by April 29, 2007, with a possible one-time extension until April 29, 2012. All nations that are party to the CWC must comply with international law and are subject to a stringent inspection regime conducted by an international agency, the Organization for the Prohibition of Chemical Weapons. The Department's policy is to safely destroy the U.S. lethal chemical stockpile as soon as possible.

The Chemical Demilitarization Program consists of the Chemical Stockpile Disposal Project, the Chemical Stockpile Emergency Preparedness Project, the Non-Stockpile Chemical Materiel Product, the Alternative Technologies and Approaches Project, and the Assembled Chemical Weapons Alternatives Program. The Director, Chemical Materials Agency has the mission to execute chemical materiel destruction by providing centralized management of the demilitarization and disposal of the United States' stockpile of lethal chemical warfare agents and munitions and all non-stockpile chemical materiel. The Program is a Major Defense Acquisition Program (Acquisition Category ID), and the Defense Acquisition Executive is the milestone decision authority.

Each of the CMA Chemical Demilitarization Program elements funded by the Chemical Agents and Munitions Destruction, Army (CAMD,A) appropriation are discussed in detail below.

**The Chemical Stockpile Disposal Project (CSDP):** The Project Manager for the CSDP is responsible for the safe and efficient destruction of the United States unitary chemical stockpile. To accomplish this mission, the Project Manager manages, plans, and coordinates all phases of the chemical disposal project. This includes design,

construction, equipment acquisition and installation, training, systemization testing, operations, and closure. The Project Manager also ensures that physical security, safety, and environmental requirements associated with the project are identified, are in compliance with all Department of Defense and Department of the Army directives and Federal, State, and local laws, and are integrated into the entire technical effort.

**The Chemical Stockpile Emergency Preparedness Project (CSEPP):** The CSEPP is an effort complementary to the Chemical Stockpile Disposal Project to enhance protection of the civilian population during storage and destruction of the United States' chemical weapons stockpile. The U.S. Army and the Department of Homeland Security (FEMA, DHS) provide emergency response/preparedness to the communities surrounding the eight continental United States (CONUS) disposal sites, and jointly manage the projects. FEMA, DHS 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 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, FEMA, DHS, and the States to address States' concerns and meet Defense Acquisition Program requirements.

**The Non-Stockpile Chemical Materiel Product (NSCMP):** In 1991, the Deputy Secretary of Defense directed that the Department of the Army be fully accountable for all Department of Defense chemical warfare related materiel destruction and designated the Secretary of the Army as Defense Executive Agent. The Product Manager for NSCMP, under the supervision of the Program Manager for Chemical Demilitarization, was established with the mission to provide centralized management and direction to the Department of Defense Agencies for disposal of non-stockpile chemical materiel in a safe, environmentally sound, and cost effective manner. The Army has defined five broad categories of non-stockpile materiel: binary chemical weapons, recovered chemical weapons, miscellaneous chemical warfare materiel, support to recoveries and remediation, and former production facilities.

Major NSCMP functions include: Identifying the magnitude of the non-stockpile program in terms of locations, types of agents and materiel, and quantities that require treatment; developing and implementing transportation, characterization, and destruction equipment and procedures; supporting ratified treaties; and developing and implementing schedule and cost estimates.

**The Alternative Technologies and Approaches Project:** In August 1994, based on recommendations in the National Research Council's Report, "Recommendations for the Disposal of Chemical Agents and Munitions," the Army initiated an aggressive research and development project on two low-temperature, low-pressure alternative technologies to the baseline process. Three additional commercial technologies were selected for consideration in November 1995 and were evaluated for potential use to destroy the stockpile at the two bulk-only sites, Aberdeen Proving Ground (APG), Maryland and Newport Chemical Depot (NECD), Indiana. In February 2002, the Aberdeen Site was approved for accelerated agent neutralization in order to reduce risk to the public. The Aberdeen process involves hot water neutralization of HD (mustard) agent, off-site shipment of the effluent to a permitted treatment, storage and disposal facility, and ton container cleanout operations. In May 2002, the Newport site also was approved for accelerated agent neutralization. The neutralization process at Newport involves sodium hydroxide and hot water neutralization of VX (nerve) agent, off-site shipment of the effluent to a permitted treatment, storage and disposal facility, and ton container cleanout operations.

**The Assembled Chemical Weapons Alternatives Program:** The Omnibus Consolidated Appropriation Act for FY 1997 (Public Law 104-208) directed that the Under Secretary of Defense for Acquisition and Technology (USD A&T), now Under Secretary of Defense for Acquisition, Technology and Logistics (USD AT&L), conduct a program to identify and demonstrate not less than two alternatives to the baseline incineration process for the demilitarization of assembled chemical munitions. In compliance with Public Law 104-208, a Program Manager for the Assembled Chemical Weapons Alternatives Program (PMACWA) was selected. Public Law 105-261 authorized PMACWA to continue to manage the development and testing (including demonstration and pilot-scale testing) of technologies for the destruction of lethal chemical munitions that are potential or demonstrated alternatives to the baseline incineration program. In 2002, Public Law 107-248 assigned the PMACWA 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.



## **Part II – Justification of Funds Required**

The funds requested in this budget submission are required to carry out the Congressional mandate of public law 99-145 and support the commitments of this nation under the Chemical Weapons Convention. This document provides justification for FY 2005 financial requirements in support of the Chemical Demilitarization Program, which is budgeted in the Chemical Agents and Munitions Destruction, Army appropriation.

In FY 2005, Chemical Stockpile Disposal Project activities will include the following items: continue post-closure environmental monitoring activities at the Johnston Atoll Chemical Agent Disposal System; continue agent operations at Tooele Chemical Agent Disposal Facility (TOCDF), Anniston Chemical Agent Disposal Facility (ANCDF), Umatilla Chemical Agent Disposal Facility (UMCDF) and Pine Bluff Chemical Agent Disposal Facility (PBCDF); continue the Chemical Agent Munitions Disposal System support to the Chemical Stockpile Disposal Project; complete ton container cleanout operations at the Aberdeen Proving Ground Facility and continue VX agent neutralization operations at Newport Chemical Depot, Indiana. The Chemical Stockpile Emergency Preparedness Project will continue to sustain emergency preparedness activities at its on-post installations and continue to support CSEPP activities at CSEPP States, a tribal government, and local communities. The Assembled Chemical Weapons Alternatives (ACWA) program will continue design efforts at Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP). Design efforts will continue at Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP), as well. Additionally, funds will be used for other costs necessary for the destruction of the chemical stockpiles including program management, public outreach, environmental permitting, and depot support.

In FY 2005, The Non-Stockpile Chemical Materiel Project (NSCMP) will include the following activities: continue destruction of former production facilities at Pine Bluff Arsenal (PBA) and Newport Chemical Depot (NECD); begin and complete assessment of the Recovered Chemical Weapons Material assessment at PBA; begin and complete equipment installation and building modifications for the PBA binary destruction facility and complete post treatment capability development for the PBA binary items; complete operational testing of the Munition Assessment and Processing System (MAPS); begin Chemical Agent Identification Sets (CAIS) destruction operations at PBA; continue development of improved technologies for treatment of neutralized waste; continue PBA ton container decontamination operations and begin cut and clean operations; conduct Chemical

Samples operations; provide Mobile Munitions Assessment System (MMAS), Rapid Response System (RRS) and Explosive Destruction System (EDS) crew sustainment, training, and emergency response capability.

### **Part III – Program Descriptions and Milestones**

**Chemical Stockpile Disposal:** The United States' stockpile of chemical agents and munitions is stored at eight sites within the CONUS and was stored at one site outside the continental United States (OCONUS) (Johnston Atoll) in the Pacific. As of 2000, the chemical munitions stockpile at Johnston Atoll was safely destroyed. The eight CONUS storage installations are located at Aberdeen Proving Ground, Maryland; Anniston Army Depot, Alabama; Blue Grass Army Depot, Kentucky; Newport Chemical Depot, Indiana; Pine Bluff Arsenal, Arkansas; Pueblo Chemical Depot, Colorado; Deseret Chemical Depot, Utah; and Umatilla Chemical Depot, Oregon.

To date, over 26 percent of the total U.S. chemical agent stockpile (measured in tons of agent) has been destroyed collectively at Johnston Atoll, and the three operational facilities at Tooele, Anniston and Aberdeen.

**Johnston Atoll Chemical Agent Disposal System (JACADS):** In November 2000, destruction of 100 percent of the original chemical agent munitions stockpile stored on the island was completed. Closure activities at the JACADS facility were completed in December 2003 and post-closure environmental monitoring activities began and will continue through FY 2005.

**Tooele Chemical Agent Disposal Facility (TOCDF):** (located at Deseret Chemical Depot, Utah): Operation of the first disposal facility in the CONUS commenced in August 1996 with the destruction of M55 GB-filled rockets. Since then, the facility has safely destroyed GB-filled ton containers, GB-filled MC-1 bombs, GB-filled M55 rockets, M56 warheads, GB-filled 105mm and 155mm projectiles, and GB-filled MK116 Weteye Bombs. In March 2002, the TOCDF met all treaty requirements for the completion of the GB campaign and began changeover activities for VX agent. Destruction of VX agent munitions began in March 2003. As of mid-January 2004, the TOCDF has destroyed over 44 percent of the original chemical agent stored at Deseret Chemical Depot. VX Agent operations will continue through FY 2004 and changeover to mustard agent operations will begin in FY 2005.

**Anniston Chemical Agent Disposal Facility (ANCDF):** In February 1996, a systems contract for the ANCDF was awarded to Washington Group International. Construction of the ANCDF was completed in June 2001. Systemization activities were completed and GB Agent limited operations began in August 2003. Full GB agent operations were approved by the Acting Secretary of the Army in October 2003 and will continue through 4<sup>th</sup> quarter FY 2005. VX Agent changeover will begin in 4<sup>th</sup> quarter FY2005, and VX agent operations will start in 1<sup>st</sup> quarter FY2006 and continue through FY 2008.

**Umatilla Chemical Agent Disposal Facility (UMCDF):** A systems contract for the UMCDF was awarded to Washington Group International in February 1997. Construction was completed in August 2001. Systemization activities will be completed, and GB Agent operations will begin in 4th quarter FY 2004 and continue through FY 2005.

**Pine Bluff Chemical Agent Disposal Facility (PBCDF):** A systems contract for the PBCDF was awarded in July 1997 to Washington Group International. Construction was completed in November 2002. Systemization activities will be completed and GB Agent operations will begin in 3rd Qtr FY 2004 and continue through FY 2005.

To carry out the Congressional mandate to safely and efficiently dispose of the unitary chemical stockpile, the Army is actively engaged in meeting all requirements of the National Environmental Policy Act (NEPA), the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA), the Clean Air Act (CAA) and the Clean Water Act (CWA). Additionally, the Army and the Department of Homeland Security Emergency Preparedness and Response (DHS-EPR)(formerly known as the Federal Emergency Management Agency (FEMA)) have developed and are implementing a Chemical Stockpile Emergency Preparedness Project to ensure that the public, the installations, and their surrounding communities are adequately protected.

**Chemical Stockpile Emergency Preparedness (CSEP):** Emergency preparedness is based on the calculated risk from all sources, including storage and demilitarization. The calculated risk from storage exceeds the risk of the demilitarization operations. Therefore, in terms of emergency preparedness, preparations for an accident involving chemical agents in the civilian community are essential both before and during the demilitarization process. Emergency responders must have the capability to immediately recognize the source and

initiate protective actions for the general public and emergency workers. This preparation requires a coordinated effort among installation, local, tribal, and State officials. The U.S. Army storage installations are in programmatic maintenance, having completed all major preparedness enhancements. The majority of Off-post essential systems designed to protect the public are in place and operational. Aggressive actions are being taken to bring the remaining systems into full compliance with the program's CSEP National Benchmarks. The U.S. Army and Department of Homeland Security(FEMA, DHS) continue to provide technical support to both civilian and Army jurisdictions using the management structure agreed upon in October 1997. Close coordination and cooperation between the U.S. Army and FEMA, DHS fostered through the use of teaming continues.

**Non-Stockpile Chemical Materiel:** The Non-Stockpile Chemical Materiel Product (NSCMP) Survey and Analysis Report was submitted to Congress in November 1993. Plans for the destruction of the non-stockpile chemical materiel were developed in 1995 and are updated as required. These plans reflect the approach needed to comply with the requirements of the Chemical Weapons Convention (CWC) and include the destruction of lethal chemical weapons, agents, and contaminated materiel. The plan provides for the development of treatment systems for the destruction of the non-stockpile chemical munitions that are currently stored at active military installations and provides for development of treatment systems for on-site destruction of chemical warfare materiel that may be recovered from suspect burial sites.

The Rapid Response System (RRS) is a mobile system to be used for the destruction of Chemical Agent Identification Sets (CAIS). The RRS is currently in an emergency response mode and will begin CAIS destruction operations at Pine Bluff Arsenal (PBA) in FY2005.

The Mobile Munitions Assessment System (MMAS) is used to determine the probable content, and condition of munition in order to establish the need for and safety of further processing. Three MMAS units are currently in an emergency response mode.

The Explosive Destruction System (EDS) is a mobile system to be used for the destruction of munitions requiring immediate destruction and small quantities of other chemical weapons. The PM NSCM currently has three Phase 1 EDS units that are operational. A Phase 2 unit will complete operational testing in FY2004. The EDS Phase 1 units are currently in an emergency response mode. Multiple EDS units will be deployed in FY2005 to destroy the Recovered Chemical Warfare Material located at PBA.

The Munitions Assessment and Processing System (MAPS) is a small cost efficient fixed facility being established to process non-stockpile chemical materiel at Aberdeen Proving Ground. The MAPS will start systemization in FY2004 and complete operational testing in FY2005.

Former Production Facility destruction efforts at Newport Chemical Depot (NECD) and Pine Bluff Arsenal (PBA) continue, and both are scheduled for completion in FY2007.

The Binary Destruction Facility (BDF) is a facility that will be refurbished and upgraded to process binary components at PBA. The BDF is in the design process, and operations are scheduled to begin in FY2005.

The Pine Bluff Munitions Assessment System (PBMAS) will be used to determine the probable content and condition of munitions and Chemical Agent Identification Set items stored at PBA prior to disposal. Assessment operations are scheduled to begin in FY2004 and complete in FY2005.

The Ton Container operations at PBA continue and are scheduled for completion in FY2007.

**Alternative Technologies and Approaches:** Originally, the Army had chosen to pilot test chemical treatment followed by on-site biodegradation at Aberdeen Proving Ground, Maryland (APG) and chemical treatment followed by super critical water oxidation (SCWO) at Newport, Indiana (NECD). The systems contractor for APG (Bechtel Aberdeen) was selected in October 1998 and for NECD (Parsons Infrastructure and Technology) in February 1999. The Resource Conservation and Recovery Act of 1976 (RCRA), Clean Air Act of 1977 (CAA) and Clean Water Act of 1977 (CWA) permit applications were submitted to the State of Maryland for the APG site in June 1997, and the environmental permits were received in February 1999. The RCRA, CAA and the CWA permit applications were submitted to the State of Indiana for the NECD site in April/May 1998, and the permits were received in December 1999.

**Aberdeen Chemical Agent Neutralization Facility (ABCANF):** The construction of the pilot facility began in July 2000. In February 2002, the Aberdeen site was approved for an accelerated agent neutralization project. A simplified agent neutralization process

was implemented, and agent neutralization commenced during FY 2003. Agent neutralization will be completed in late FY2004, and ton container clean out activities will begin in FY2004.

**Newport Chemical Agent Neutralization Facility (NECANF):** As of May 2002, the Newport site was also been approved for an accelerated agent neutralization project. A simplified agent neutralization process begins in FY 2004 and ton container cleanout processing is planned to begin in FY2008.

**The Assembled Chemical Weapons Alternatives Program:** The foundation of the Assembled Chemical Weapons Alternatives (ACWA) Program is stakeholder involvement from each of the agent stockpile areas and their concerns about the program. The program was established by integrating a three-phased approach: program evaluation criteria development, detailed assessment of technologies, and the demonstration of technologies. The assessment and demonstration phases were successfully completed in 2002. The USD (AT&L) approved neutralization followed by bio-treatment as the technology for the destruction of the chemical weapons stockpile at Pueblo, Colorado in July 2002 and neutralization followed by supercritical water oxidation as the destruction technology for the stockpile at Blue Grass, Kentucky in February 2003. A systems contract for the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) was awarded in September 2002 to the Bechtel Pueblo Team. A systems contract for the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) was awarded to the Bechtel Parsons Blue Grass Team in June 2003. Design efforts for PCAPP and BGCAPP are continuing for the eventual construction and operation of full-scale pilot facilities at Pueblo and Blue Grass.

**Chemical Demilitarization Program Oversight:** The Army receives assistance from such Federal agencies as the Department of Health and Human Services, U.S. Environmental Protection Agency, Department of Transportation, Federal Emergency Management Agency, and the President's Council on Environmental Quality in meeting its responsibility to carry out the Chemical Demilitarization Program in a safe and environmentally sound manner. The National Research Council of the National Academy of Sciences also performs an oversight function for the Chemical Demilitarization Program.

Additionally, the National Defense Authorization Act for Fiscal Year 1993 (Public Law 102-484) directed the Army to establish a Chemical Demilitarization Citizens' Advisory Commission (CAC) for each low-volume site and for any state in which there is located a chemical stockpile storage site, if requested by the Governor. The CACs have been established for each state. Representatives from the Office of the Assistant Secretary of the Army (Acquisition, Logistics, & Technology) meet not less than twice a year with each commission to address citizen and state concerns regarding the Army's ongoing Chemical Demilitarization Program.

**Major Milestones for the Chemical Stockpile Disposal Project are as follows:**

**Johnston Atoll Chemical Agent Disposal System (JACADS):**

Completed Agent Processing	November 2000
Began processing of waste, decommissioning and dismantlement	January 2001
Continued closure activities	FY 2003
Completed closure activities	December 2003
Initiate post closure environmental monitoring activities	2nd Qtr FY 2004 to FY 2005

**Tooele Chemical Agent Disposal Facility (TOCDF):**

Completed GB campaign	March 2002
Completed GB to VX agent changeover	March 2003
Process VX-filled munitions	March 2003 to 2nd Qtr FY 2005
Complete VX to HD agent changeover	2nd Qtr FY 2005 to 1st Qtr FY 2006
Process HD-filled munitions	1st Qtr FY 2006 to 4th Qtr FY 2008

**Anniston Chemical Agent Disposal Facility:**

Completed construction	June 2001
Completed systemization	August 2003
Process GB filled munitions	August 2003 to 4th Qtr FY 2005
Complete GB to VX agent changeover	4th Qtr FY 2005 to 1st Qtr FY 2006
Process VX-filled munitions	1st Qtr FY 2006 to 1st Qtr FY 2008

**Umatilla Chemical Agent Disposal Facility:**

Completed construction	August 2001
Complete systemization	4th Qtr FY 2004
Process GB filled munitions	4th Qtr FY 2004 to 1st Qtr FY 2006
Complete GB to VX Agent changeover	2nd Qtr FY 2006 to 4th Qtr FY 2006
Process VX filled munitions	4th Qtr FY 2006 to 2nd Qtr FY 2008



**Major Milestones for the Chemical Stockpile Disposal Project (Cont'd):**

**Pine Bluff Chemical Agent Disposal Facility:**

Completed construction	November 2002
Complete systemization	3rd Qtr FY 2004
Process GB filled rockets	3rd Qtr FY 2004 to 1st Qtr FY 2006
Complete GB to VX agent changeover	1st Qt FY 2006 to 2nd Qtr FY 2006
Process VX filled munitions	2nd Qtr FY 2006 to 1st Qtr FY 2007

**Major Milestones for the Alternative Technologies and Approaches Project are as follows:**

Army submitted final report on Alternative Chemical Demilitarization Technologies to Congress	April 1994
Army provided recommendation to Department of Defense Overarching Integrated Product Team to conduct necessary National Environmental Policy Act analysis and continue Research and Development efforts to support pilot testing of alternative technologies at Aberdeen Proving Ground, Maryland and Newport Chemical Depot, Indiana	December 1996
Office of Secretary of Defense (OSD) Approval of Army Recommendation	January 1997

**Aberdeen Chemical Agent Neutralization Facility**

Decision to proceed to accelerated project	February 2002
Award of new contract	February 2002
Start agent neutralization operations	April FY 2003
End agent neutralization operations	4th Qtr FY 2004
Begin empty ton container operations	2nd Qtr FY 2004
End Empty ton container operations	3rd Qtr FY 2005
Start Closure	4th Qtr FY 2005

**Newport Chemical Agent Neutralization Facility**

Decision to proceed to accelerated project	May 2002
Start agent neutralization operations	3rd Qtr FY 2004

**Major Milestones for the Chemical Stockpile Disposal Project (Cont'd):**

**Newport Chemical Agent Neutralization Facility (Cont'd)**

End agent neutralization operations	3rd Qtr FY 2008
Begin empty ton container operations	3rd Qtr FY 2008

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

**Program**

Program Inception	1997
Criteria Development, Assessment, Demonstration of Alternative Technologies	1997 to 2002
Published Pueblo Draft Environmental Impact Statement	May 2001
Published Blue Grass Draft Environmental Impact Statement	May 2002
Received Pueblo Record of Decision and Technology Selection	July 2002
Received Blue Grass Record of Decision and Technology Selection	February 2003

**Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP)**

Record of Decision and Technology Selection	July 2002
Systems Contract Award	September 2002
RCRA Permit Application Submittal	December 2003
Facility Construction	FY 2005- FY 2009

**Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)**

Record of Decision and Technology Selection	January 2003
Systems Contract Award	June 2003
RCRA Permit Application Submittal	2nd Qtr FY 2004
Facility Construction	FY 2005 - FY 2009

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

On-post Milestone	
Sustainment phase of the Improved Response Capabilities	September 1997
Off-post Milestone	
Sustainment phase of the Improved Response Capabilities	4th Qtr FY 2004

**Joint Milestones:**

Close out of response capabilities following the completion of demilitarization operations at:	
Aberdeen Proving Ground, Maryland	4th Qtr FY 2005
Deseret Chemical Depot, Utah	4th Qtr FY 2009
Newport Chemical Depot, Indiana	4th Qtr FY 2008

**Major Milestones for the Non-Stockpile Chemical Materiel Product are as follows:**

**Explosive Destruction System (EDS):**

Conduct Dev/Op Testing of Phase 2, Unit 1	April 2003 to April 2004
Procure two EDS Phase 2 Systems	1st Qtr FY 2006
Procure one EDS Phase 2 System	1st Qtr FY 2007

**Rapid Response System (RRS):**

Procure one RRS	1st Qtr FY 2006
-----------------	-----------------

**Munitions Assessment and Processing System (MAPS):**

Initiate Systemization	January 2004
Begin MAPS Operations	2nd Qtr FY 2005

**Pine Bluff Non-Stockpile Facility (PBNSF):**

Began Development of Preliminary Concept Design	September 2000
Halted PBNSF Design and Development	December 2003

**Major Milestones for the Non-Stockpile Chemical Materiel Product (Cont'd):**

**Binary Materiel:**

Destroy Bulk DF, QL, and M20DF Canister 4th Qtr FY 2005 to 2nd Qtr FY 2006

**Former Production Facility:**

Complete 80% Destruction of U.S. Production Capacity \* January 2004  
Complete 100% Destruction of U.S. Production Capacity \* 3rd Qtr FY 2007

\*NOTE: Chemical Warfare Convention Milestone

**Destruction of Chemical Warfare Materiel (CWM) and Facilities [Missions]:**

Demolish NCD Production Facility steps 0,I,II August 1998 to 1st Qtr FY 2006  
Demolish NCD Production Facility step III 4th Qtr FY 2002 to 3rd Qtr FY 2007  
Demolish PBA Integrated Binary Facility October 2003 to 3rd Qtr FY 2007  
Demolish APG Ancillary Buildings 1st Qtr FY 2007 to 4th Qtr FY 2008

**Chemical Samples\* (CS):**

Destroy Aberdeen Proving Ground (APG) CS January 2000 to 3rd Qtr FY 2006  
Destroy Deseret Chemical Depot (DCD) CS\* FY 2003  
Destroy Dugway Proving Ground (DPG) CS\* FY 2003  
Destroy Pine Bluff Arsenal (PBA) CS\* FY 2005 to FY 2006  
Destroy Pueblo Chemical Depot (PUCD) CS\* FY 2006

\*NOTE: Schedules under study due to change in public law allowing use of Chemical Demilitarization Facilities

**Chemical Samples\* (CS):**

Destroy Anniston Army Depot (ANAD) CS\* FY 2006  
Destroy Umatilla Chemical Depot (UMCD) CS\* FY 2004 to FY 2005  
Destroy Blue Grass Chemical Depot (BGAD) CS\* FY 2009

\*NOTE: Schedules under study due to change in public law allowing use of Chemical Demilitarization Facilities

**Major Milestones for the Non-Stockpile Chemical Materiel Product (Cont'd):**

**Empty Ton Containers (TCs):**

PBA Empty TCs:	
Install and Test Enclosure (R&D)	September 2001 to September 2003
Begin Destruction (O&M)	September 2003
APG Empty TCs:	FY 2004
Begin Destruction (Aircraft Protect)	

**Recovered CWM (RCWM)**

Begin RCWM Operations at:	
APG (MAPS)	2nd Qtr FY 2005 to 3rd Qtr FY 2007
PBA (PBEDS)*	3rd Qtr FY 2005 to 2nd Qtr FY 2007
DPG *	3rd Qtr FY 2004 to 1st Qtr FY 2005

\*NOTE: Pine Bluff Explosive Destruction System (PBEDS) deployment of multiple EDS units to destroy RCWM located at PBA.

**Recovered Chemical Agent Identification Sets (CAIS):**

Destruction of Recovered CAIS at:	
Fort Richardson	July 2003
Pine Bluff Arsenal	1st Qtr FY 2005 to 3rd Qtr FY 2006
Additional sites	3rd Qtr FY 2006 to 3rd Qtr FY 2007

**BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

**Justification of Funds Required**

(In Thousands of Dollars)

<b>FY 2005 Estimate</b>	<b>\$1,138,801</b>
<b>FY 2004 Budget</b>	<b>\$1,169,168</b>
<b>FY 2003 Actual</b>	<b>\$1,007,307</b>

**Purpose and Scope**

This budget activity provides for the management, technical and operational support required for chemical demilitarization under the Chemical Stockpile Disposal Project (CSDP), Alternative Technologies & Approaches Project (ATAP), and emergency response activities under the Chemical Stockpile Emergency Preparedness Project (CSEPP). It also provides for the support required for remediation of other chemical warfare materiel under the Non-Stockpile Chemical Materiel Product (NSCMP).

**Justification of Funds Required**

Operations financed by this budget activity in FY 2005 include: program management for the Chemical Demilitarization Program and Chemical Stockpile Disposal Project (CSDP); program and integration support including public affairs, safety and quality assurance; program oversight, environmental and engineering services; continue post-closure environmental monitoring at the Johnston Atoll Chemical Agent Disposal System (JACADS); continuation of Chemical Agent Munitions Disposal System (CAMDS) testing to support the CSDP; continuation of training activities at the Chemical Demilitarization Training Facility (CDTF); continuation of disposal operations at Tooele Chemical Agent Disposal Facility (TOCDF); continuation of disposal operations at Anniston Chemical Agent Disposal Facility (ANCDF); continuation of disposal operations at Umatilla Chemical Agent Disposal Facility (UMCDF); and continuation of disposal operations at Pine Bluff Chemical Agent Disposal Facility (PBCDF).

In addition, the budget provides for Alternative Technologies and Approaches requirements for program management, supports ton container cleanout activities and

## **BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

### **Justification of Funds Required**

closure at the Aberdeen, MD site; supports VX neutralization activities at the Newport, IN Site; continued support of emergency response capabilities at the state, tribal, and local levels of government and at the chemical stockpile storage installations; and Non-Stockpile Chemical Materiel requirements for destroying chemical warfare-related materiel which includes costs for Program Management, Recovered Chemical Warfare Materiel (CWM), Miscellaneous CWM, binary chemical weapons, continued destruction of Former Production Facilities, and programmatic support activities which include regulatory requirements, public affairs, program integration, support equipment, and logistics support.

FY 2005 funding has been increased at the Tooele, Anniston, Umatilla, Pine Bluff and Aberdeen facilities to support the following high priority emergent efforts:

Tooele - Reconfiguration of mines and projectiles to remove energetics to increase processing rates; secondary waste enhancements to minimize production and storage of waste; performing agent feed characterization to determine metals content; safety improvements; and costs associated with schedule delays associated with longer than anticipated corrective measures required after the July 2002 agent exposure incident.

Anniston - Reconfiguration of mines and projectiles to remove energetics to increase processing rates; secondary waste enhancements to minimize production and storage of waste; improvements in agent changeover between campaigns; and safety improvements.

Umatilla - Agent sampling, characterization, laboratory analysis, and transportation of surety samples to determine content of mustard agent anomalies and heel level in ton containers; mines and rockets reconfiguration; secondary waste enhancements; and improvements in agent changeover durations; safety improvements; and increased employee wage rates negotiated with the systems contractor due to local market conditions and inability to attract qualified workers.

**BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

**Justification of Funds Required**

Pine Bluff - Agent sampling, characterization, laboratory analysis, and transportation of surety samples; reconfiguration VX mines; safety improvements; and wage rates increases negotiated with the systems contractor due to local market conditions and inability to attract qualified workers.

Aberdeen - Additional resources for processing delays that occurred during operations and the extension of the schedule into FY 2005 for ton container operations and closure activities.



**BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

Funded Financial Summary  
(In Thousands of Dollars)

	FY 2003 Actual	FY 2004 Budget	FY 2005 Estimate
<b>Cml Demil--Program Management</b>	<b>10,062</b>	<b>11,130</b>	<b>11,094</b>
<b>Cml Demil Programmatic Support Activities</b>	<b>14,293</b>	<b>21,121</b>	<b>19,370</b>
Cml Stockpile Disposal--Program Mgmt	12,003	14,385	16,750
CSD Programmatic Support Activities	37,328	39,500	32,253
Johnston Atoll Chemical Agent Disposal System	124,150	28,525	572
Chemical Agent Munitions Disposal System	25,221	29,632	29,378
Chemical Demilitarization Training Facility	9,127	2,387	9,913
Tooele Chemical Agent Disposal Facility	126,825	150,351	144,985
Anniston Chemical Agent Disposal Facility	110,579	135,948	131,981
Umatilla Chemical Agent Disposal Facility	130,946	134,622	160,583
Pine Bluff Chemical Agent Disposal Facility	112,886	127,847	128,190
Pueblo Chemical Agent Disposal Facility	0	0	0
Blue Grass Chemical Agent Disposal Facility	350	0	0
<b>Subtotal Chemical Stockpile Disposal</b>	<b>689,415</b>	<b>663,197</b>	<b>654,605</b>
Alternative Technologies and Approaches - Program Management	2,627	6,823	6,125
Alternative Technologies and Approaches - Mission Aberdeen, MD	83,146	92,214	89,999
Alternative Technologies and Approaches - Mission Newport Ind	4,112	106,116	127,728
<b>Subtotal Alternative Tech and Approaches</b>	<b>89,885</b>	<b>205,153</b>	<b>223,852</b>
Cml Stockpile Emergency Preparedness Project On-Post-- Prgm Mgmt	1,564	1,614	1,658
Cml Stockpile Emergency Preparedness Project On-Post--Mission	31,396	40,516	38,795
Cml Stockpile Emergency Preparedness Project Off-Post--Mission	70,666	97,681	59,815
<b>Subtotal Chemical Stockpile Emergency Preparedness Proj *</b>	<b>103,626</b>	<b>139,811</b>	<b>100,268</b>
<b>Non-Stockpile Chemical Materiel--Program Management</b>	<b>5,203</b>	<b>6,131</b>	<b>5,470</b>
Recovered Chemical Warfare Materiel (CWM)	37,351	40,720	50,099
Miscellaneous CWM	14,928	17,617	5,651
Binary CWM	3,626	10,504	12,745
Former Production Facility	27,880	41,026	41,807
Programmatic Support Activities	11,038	12,758	13,840
<b>Mission Subtotal</b>	<b>94,823</b>	<b>122,625</b>	<b>124,142</b>
<b>Subtotal Non-Stockpile Chemical Materiel Product</b>	<b>100,026</b>	<b>128,756</b>	<b>129,612</b>
<b>Total Funded</b>	<b>1,007,307</b>	<b>1,169,168</b>	<b>1,138,801</b>

## **BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

### **Justification of Funds Required**

**Program Manager for Elimination of Chemical Weapons (PMECW)--Program Management:** This area provides for total management of the demilitarization and disposal of the U.S. chemical weapons stockpile and non-stockpile materiel. In addition, this activity provides the programmatic direction and matrix support required by the three project managers who execute the program.

The FY 2005 budget request includes 48 work years of labor, awards and overtime; base support; other support and contractual costs which include travel, transportation, materials and supplies, equipment and rentals; and matrix support from U.S. Army Research Development & Engineering Command for 44 work years of labor.

**Chemical Demilitarization Programmatic Support Activities:** This element will fund programmatic management integration activities by contractor and support activities, and oversight and technical efforts by government performers or contractors, which will benefit the entire CMA mission. Performers will conduct programmatic studies and evaluations; collect, organize, format and maintain data; and consolidate and prepare acquisition, technical and management reports; provide contract support; information management; and other programmatic costs of the program.

The FY 2005 budget request includes safety and quality functions; program integration efforts such as acquisition program reporting, project monitoring, decision support, life-cycle-cost database support, and information management and support; system engineering support; material management; litigation support; facility management training program; contracting support from U.S. Army Materiel Command; and program oversight, studies and evaluations.

**Project Manager for Chemical Stockpile Disposal (PMCS D)--Program Management:** Program Management includes implementation and execution, as well as management of the design, development, and acquisition of equipment and facilities, on-site movement of chemical munitions and agents for disposal, demilitarization operations, disposal of waste products, post-operational cleanup activities, and plant closure.

## BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE

### Justification of Funds Required

The FY 2005 budget request includes 46 work years of labor, awards and overtime; base support; other support and contractual costs which include travel, transportation, materials and supplies, equipment and rentals; and matrix support from U.S. Army Research Development & Engineering Command for 63 work years of labor.

**Project Manager for Chemical Stockpile Disposal (PMCS D)–Programmatic Support:** This element will fund programmatic technical and management integration activities by contractors. Contractors will conduct programmatic studies and evaluations; collect, organize, format and maintain data; conduct technical services such as medical support; and consolidate and prepare technical and management reports. This element will also fund oversight and technical efforts by government performers or contractors. Activities include oversight by the Department of Health and Human Services and the National Academy of Sciences; acquisition of substitute munitions for use in equipment prove-out, pre-operational test and training exercises; administrative and technical support to design efforts; and other programmatic costs of the program.

The FY 2005 budget request includes safety and quality functions; program integration efforts such as acquisition program reporting, project monitoring, decision support, life-cycle-cost database support, and information management and support; and public outreach offices and public affairs initiatives such as videos, newsletters, publicity and exhibits. The budget request also includes engineering services in support of design, model and simulation, agent monitoring, environmental support, and litigation support; National Environmental Policy Act documentation; contracting support from the U.S. Army Field Support Command and the U.S. Army Materiel Command; substitute munitions; program oversight, studies and evaluations; and demilitarization support.

**Johnston Atoll Chemical Agent Disposal System (JACADS):** This item includes funding to continue post closure activities.

The FY 2005 budget will fund the continuation of post-closure environmental monitoring activities.

**BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

**Justification of Funds Required**

**Chemical Agent Munitions Disposal System (CAMDS):** This prototype facility will support the destruction of Lewisite, the stockpile program, the GA/GA-UCON destruction, secondary waste destruction and closure activities.

The FY 2005 budget requirements includes 178 work years of labor to support the CAMDS work force; other support costs which includes materials/supplies, travel, training, and contracts; depot support/base support which includes 37 work years and utilities; other government agency support; and environmental support.

**Chemical Demilitarization Training Facility (CDTF):** This item includes funding required to continue operation of the chemical demilitarization training facility located at Edgewood Area, Aberdeen Proving Ground, Maryland through FY 2005.

The FY 2005 budget request will fund the systems contract to General Physics, Inc. (ongoing) that includes 20 work years and other non-labor items; depot support/base operations, and contracting and site support.

**Tooele Chemical Agent Disposal Facility (TOCDF):** This item includes funding required to continue operations at the chemical demilitarization facility located at Tooele, Utah through FY 2005.

The FY 2005 budget requirements will fund the systems contract that includes 777 work years, waste disposal, mitigation fees, materials and supplies, equipment rental, spare parts and refractory; training; and other non-labor items. It will fund environmental support/fees and cooperative agreements; depot support/base operations (163.5 work years); and contracting and site support.

**Anniston Chemical Agent Disposal Facility (ANCDF):** This item includes funding required to continue agent demilitarization operations at the chemical demilitarization facility located at Anniston, Alabama through FY 2005.

## **BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

### **Justification of Funds Required**

The FY 2005 budget request will fund the systems contract that includes 665 work years, materials, waste disposal, training and other non-labor items. It will fund environmental support/fees and cooperative agreements; depot support/base operations (135 work years); safety; and contracting and site support.

**Umatilla Chemical Agent Disposal Facility (UMCDF) O&M Requirements:** This item includes funding required to continue operations at the chemical demilitarization facility located at Hermiston, Oregon through FY 2005.

The FY 2005 budget request will fund the Systems Contractor which includes 648 work years, waste disposal, spare parts, trial burns, training and other non-labor items. It will fund safety and quality assurance efforts; environmental support and cooperative agreements; depot support/base operations, which include 126 work years; contracting and site support; and a cooperative agreement with the Confederated Tribes of the Umatilla Indian Reservation.

**Pine Bluff Chemical Agent Disposal Facility (PBCDF):** This item includes funding required to continue agent disposal activities at the chemical demilitarization facility located in Pine Bluff, Arkansas through FY 2005.

The FY 2005 budget request will fund the systems contract which includes 648 work years, waste disposal, trial burns, supplies and materials, training and other non-labor items. It will fund environmental support/fees and cooperative agreements; depot support/base operations (137 work years); and safety, quality assurance efforts, contracting and site support.

**Alternative Technologies and Approaches Project Program Management:** The FY2005 budget for program management includes internal operating budget costs for labor, awards and overtime for 12 core work years and 20 matrix work years, travel, other costs such as contractual services, training, and supplies; and programmatic mission support cost for program oversight, public outreach support; program integration and cost support; and contract management and technical support.

## **BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

### **Justification of Funds Required**

**Aberdeen Chemical Agent Neutralization Facility (ACANF):** The FY 2005 budget request includes requirements for system contractor activities (450 work years) to complete ton container cleanout operations and to support closure; and non-system contractor activities such as field office/technical support/contracting support; hazardous waste disposal; scrap metal disposal; and other government agency support.

**Newport Chemical Agent Neutralization Facility (NCANF):** The FY 2005 budget request includes requirements for systems contractor (499 work years) to include systems engineering/project management; process design; laboratory site support; environmental compliance, safety, surety, and security; installation of process equipment and bulk material; materials, supplies, and equipment; and non-systems contractor activities such as field office/technical support/contracting support; depot support and other government agency support.

**Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post Program Management:** The FY 2005 budget request includes 13 work years of labor, awards and overtime and travel, training, and contractual services.

**Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post Mission:** The FY 2005 budget request provides continued support of emergency planner/response personnel for the eight chemical stockpile storage installations; funds for Army travel and transportation; on-post training and annual joint exercises; Army public education and awareness programs; and administration, base operations, technical planning support, and operations and maintenance costs for on-post alert and notification, data automation, communications, Emergency Operation Centers, Joint Information Centers, and emergency response. This budget request also provides for Army managed technical support for sustaining both on-post and off-post emergency response capabilities. This technical support includes modeling and meteorological support for alert and notification systems; software engineering, maintenance, and training for emergency management automation systems; management of a wide area communications network; engineering and testing support for

## BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE

### Justification of Funds Required

response and protective actions systems, and chemical agent specific medical support training.

**Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-post Mission:** The FY 2005 budget request provides continued support of emergency planner/response personnel for FEMA, State, tribal, and local governments; funds for FEMA, State, tribal, and local administration including travel and transportation; off-post training and exercises and annual joint exercises; FEMA, State, tribal, and local public outreach/education programs including Joint Information Centers; operations and maintenance of off-post alert and notification systems, Emergency Operations Centers, communications systems, coordinated plans, and medical support, protective action capabilities including emergency response capabilities. This budget request also provides for FEMA managed technical support for off-post emergency response capabilities. This technical support includes engineering support for Alert and notification and communications systems, planning support, hospital team training, and support for State protective actions projects.

**Non-Stockpile Chemical Materiel Product (NSCMP):** The FY 2005 budget request provides for the following activities:

**Program Management:** The FY 2005 budget request includes 19 work years of labor, awards and overtime; base support; other support and contractual costs which include travel, transportation, materials and supplies, equipment rentals; and matrix support from U.S. Army Soldier Biological and Chemical Command for 23 work years of labor.

**Recovered Chemical Warfare Materiel:** The FY 2005 budget request consists of continuation of CAIS destruction operations at PBA; begin and complete assessment of chemical warfare materiel at PBA, MMAS and EDS destruction operations, MMAS and EDS crew training, and purchase of replacement equipment in support of MMAS and EDS.

**Miscellaneous Chemical Warfare Materiel:** The FY 2005 budget request consists of continuation of empty Ton Container decontamination operations at Pine Bluff Arsenal (PBA); and chemical samples operations.

**BUDGET ACTIVITY 1: OPERATION AND MAINTENANCE**

**Justification of Funds Required**

**Binary Chemical Warfare Materiel:** The FY 2005 budget request consists continuation of integration support, equipment installation, systemization, and training program development for PBA.

**Former Production Facility:** The FY 2005 budget request consists of the continuation of demolition efforts and waste management activities for former production facilities at NECD and PBA; and beginning of environmental permitting activities for former production facilities at Aberdeen Proving Ground.

**Programmatic Support Activities:** The FY 2005 budget request consists of project management activities such as: public outreach; program integration; engineering support; information management; configuration management; procurement and contract evaluation support); logistics, treaty, lessons learned and medical support; regulatory requirements to support PEIS and NEPA documentation, and state regulatory review agencies; programmatic training; and programmatic support equipment such as multiple round containers for recovered chemical munitions.



**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

(In Thousands of Dollars)

<b>FY 2005 Estimate</b>	<b>\$154,209</b>
<b>FY 2004 Budget</b>	<b>\$251,881</b>
<b>FY 2003 Actual</b>	<b>\$314,879</b>

**Purpose and Scope**

This budget activity provides resources for the design, acquisition and testing of prototype equipment for the recovery and treatment of the non-stockpile chemical materiel.

**Justification of Funds Required**

Funds are required for the Non-Stockpile Chemical Materiel (NSCM) Program in FY 2005 to continue research and development efforts for innovative accessing and chemical treatment processes technologies, begin/complete equipment installation and begin systemization for the Pine Bluff Non-Stockpile Facility, complete post treatment capability development, begin/complete Multiple Launch Rocket System facility modification, and begin/complete equipment installation for Binary chemical warfare materiel at Pine Bluff Arsenal. Funds are required for environmental monitoring support to perform studies, provide technical assistance for compliance with Army regulations, and modernizing equipment for future needs. Funds are required for the Assembled Chemical Weapons Alternatives (ACWA) program to continue design efforts and begin equipment purchases for the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP), and to continue design efforts for the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP). Funds are also required for program management, public outreach, and environmental compliance and permitting.

The Department is reviewing the 30 percent completed Pueblo facility design for approval, and is evaluating design adjustments due to initial design concerns. As such, Pueblo funds previously budgeted in FY 2005 were realigned to the Operation and Maintenance and Procurement sections of the Chem Demil program to support critical emergent requirements.

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

**Funded Financial Summary  
(In Thousands of Dollars)**

**A**

Title	FY 2003 Budget	FY 2004 Estimate	FY 2005 Estimate
Alternative Technologies and Approaches - Program Management	5,178	0	0
Alternative Technologies and Approaches -Mission Aberdeen Proving Ground, MD	47,794	0	0
Newport Chemical Depot, IN	107,900	38,343	0
<b>Subtotal Alternative Tech and Approaches</b>	<b>160,872</b>	<b>38,343</b>	<b>0</b>
Non-Stockpile Chemical Materiel Product- Recovered Chemical Warfare Materiel (CWM)	31,587	21,941	8,365
Miscellaneous CWM	0	0	0
Binary CWM	1,907	10,446	11,322
Program-Wide R&D	16,672	11,222	9,537
<b>Subtotal Non-Stockpile Chemical Materiel Product -</b>	<b>50,166</b>	<b>43,609</b>	<b>29,224</b>
Assembled Cml Weapons Alternatives Program - Program Management	16,475	14,347	14,200
Pueblo, Co	67,822	122,792	4,941
Blue Grass, KY	14,544	32,790	105,844
<b>Subtotal Assembled Cml Weapons Assessment</b>	<b>98,841</b>	<b>169,929</b>	<b>124,985</b>
<b>Subtotal Cml Stockpile Emer Preparedness Project</b>	<b>5,000</b>	<b>0</b>	<b>0</b>
<b>Funded Total</b>	<b>314,879</b>	<b>251,881</b>	<b>154,209</b>

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

**B. DESCRIPTION OF ELEMENT:**

**Alternative Technologies and Approaches Project:**

This budget activity provides resources for research and development of alternatives to incineration for the disposal of bulk chemical agents. The Project Manager for Alternative Technologies and Approaches implemented a program including laboratory and bench-scale testing, pilot plant design, and preparation of environmental documentation for two low-temperature, low-pressure technologies, and facility construction to pilot test these alternative technologies. Subsequent to the September 11, 2001, terrorist attacks, the Program Manager for Alternative Technologies and Approaches initiated a proposal to accelerate stockpile destruction at Aberdeen and Newport in order to reduce risk to the public by eliminating the stockpile approximately two years ahead of schedule. Acquisition Decision Memorandums approving accelerated neutralization were signed on February 1, 2002 for Aberdeen and on May 11, 2002 for Newport. A simplified agent neutralization process followed by shipment to a permitted Treatment Storage and Disposal Facility for post-treatment is being implemented.

**Non-Stockpile Chemical Materiel Product:**

Funds are included to complete design and continue fabrication of equipment to destroy RCWM located at Pine Bluff Arsenal and for development of improved technologies for disposing of neutralized waste. Research will continue on multi-agent chemical air monitoring and decontamination methods. Funds are also included to continue design efforts and begin post treatment capability development for the binary solution, complete developmental/operational testing of the Explosive Destruction System (EDS) Phase 2, Unit 1.

**Assembled Chemical Weapons Alternatives Program:**

This budget activity includes all costs related to design; equipment, testing, and costs for operation and closure of two full-scale pilot facilities, the Pueblo Chemical Agent-Destruction Pilot Plant and the Blue Grass Chemical Agent-Destruction Pilot Plant. The budget activity also provides for the preparation of the necessary environmental documentation to support construction and operation of the two pilot facilities, as well

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

as, public outreach and technical risk reduction initiatives. Costs for design and construction of facilities are included in the Chemical Demilitarization Construction, Defense account.

**C. PROGRAM ACCOMPLISHMENTS AND PLANS:**

**FY 2003 Program:**

**Alternative Technologies and Approaches Project:**

Program Management: The budget for program management included: internal operating budget costs for labor, awards, and overtime for 6 core work years and 8 matrix work years, other costs, such as contractual services, training and supplies; and programmatic mission support costs for program oversight, public outreach support, program integration support, technology evaluation, and contract management and technical support.

Aberdeen Chemical Agent Neutralization Facility: FY 2003 funds were required for: systems contractor activities (445 work years) to include process design; continued environmental activities; installation of process equipment and bulk materials; neutralization facility systemization activities; system engineering/project management; and non-systems contractor activities such as program outreach support; and other government agency support.

Newport Disposal Facility: FY 2003 funds were required for: systems contractor activities (628 work years) to include process design, laboratory site support, environmental compliance, safety, surety and security, procurement of process equipment and bulk material, materials, supplies and equipment, installation of process equipment and bulk material, systemization activities, systems engineering/project management, operations support/training and facility maintenance, and Non-Systems Contractor activities such as field office/technical support/contracting support, depot support and other government agency support.

**Non-Stockpile Chemical Materiel Product:**

## **BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

### **TITLE: DEMILITARIZATION TECHNOLOGY**

Recovered Chemical Warfare Materiel: Funds were required to continue developmental testing of the EDS Phase 2 Unit 1; continue design efforts and begin the equipment acquisition phase for the PBNSF; and begin testing of the Large Item Transportable Neutralization System (LITANS).

Binary: Funds were required to begin and complete site design for the binary mission at Pine Bluff Arsenal.

Program-Wide R&D: Funds were required for studies and program support. This included efforts to identify and develop alternative technologies for the treatment of NSCMP Chemical Warfare Materiel; continue efforts pertaining to decontamination research and Air Monitoring Studies, Tennessee Valley Authority technical support, systems engineering services, and system test and evaluation support.

#### **Assembled Chemical Weapons Alternatives Program:**

Program Management: Funds were used for ACWA Program Office salaries and other expenses including 11 core work years and 9 matrix work years; ACWA support from other government agencies and support contracts.

Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Funds were used for system contractor activities to include initiation of process design; environmental activities; public outreach office support; depot support; finalization of technical support contracts; and support from other government agencies.

Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP): Funds were used for initiation of the Technical Risk Reduction Program (TRRP), the Design Build Plan, and Initial Design; public outreach office support; depot support; and support from other contractual and other government agencies to initiate design planning activities.

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

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

Defense Access Road Requirements: Funds were provided by Congress to continue work to improve emergency access and evaluation infrastructure at Pine Bluff Arsenal, AR and Tooele Army Depot, UT.

**FY 2004 Program:**

**Alternative Technologies and Approaches Project:**

Newport Disposal Facility: FY 2004 funds are required for systems contractor activities (158 work years) to include systems engineering/project management; process design; systemization activities and logistics support; procurement of bulk materials and equipment; installation of the process equipment and bulk material; and non-systems contractor support such as field office, technical support/contractor support, depot support, and other government agency support.

**Non-Stockpile Chemical Materiel Product:**

Recovered Chemical Warfare Materiel: Funds are required to complete developmental/operational testing of the Explosive Destruction System (EDS) Phase 2, Unit 1 and complete design efforts, equipment fabrication, and complete permitting for Pine Bluff Non-Stockpile Facility (PBNSF).

Binary: Funds are required to begin/complete process equipment component procurement and begin secondary waste treatment partnering for the binary mission at Pine Bluff Arsenal (PBA).

Program-Wide R&D: Funds are required for research and development studies and program support. These includes efforts to identify and develop alternative technologies for the treatment of non-stockpile chemical warfare materiel; continue efforts pertaining to decontamination research and Air Monitoring Studies; Tennessee Valley Authority (TVA) technical support and services; and Army Materiel Systems Analysis Activity (AMSAA) test and evaluation support.

**Assembled Chemical Weapons Alternatives Program:**

## **BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

### **TITLE: DEMILITARIZATION TECHNOLOGY**

Program Management: Funds will be used for ACWA Program Office salaries for 12 core work years and 9 matrix personnel, supplies, materials and equipment, travel and training; program integration and support from other government agencies; contract management and technical support; and mission support contracts.

Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP): Funds will be used for the system contractor to continue process design, begin long-lead equipment procurements, and training; depot support; continuation of environmental permitting activities; and program mission support.

Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP): Funds will be used for preparation of preliminary process design package and initial design and preparation of Research, Development and Demonstration (RD&D) permit application; technical risk reduction and program testing and studies; and program management and other government agencies support.

#### **FY 2005 Program:**

#### **Non-Stockpile Chemical Materiel Product:**

Recovered Chemical Warfare Materiel: Funds are required for the Pine Bluff Explosive Destruction System (PBEDS) site preparation, setup and systemization.

Binary: Funds are required to complete secondary waste treatment partnering, begin/complete facility modifications and begin/complete equipment installation for the binary mission at Pine Bluff Arsenal (PBA).

Program-Wide R&D: Funds are required for research and development studies and program support. These includes efforts to identify and develop alternative technologies for the treatment of non-stockpile chemical warfare materiel; continue efforts pertaining to decontamination research and Air Monitoring Studies; Tennessee Valley Authority (TVA) technical support and services; and Army Materiel Systems Analysis Activity (AMSAA) system test and evaluation support.

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

**Assembled Chemical Weapons Alternatives Program:**

Program Management: Funds are required for ACWA Program Office salaries for 12 core work years and 9 matrix personnel, supplies, materials and equipment, travel and training; and other government agencies and mission support contracts.

Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Funds are required for the continuation of project and management activities.

Blue Grass Chemical Agent-Destruction Pilot Plant (BGAPP): Funds are required for the preparation of Intermediate Design Packages and continuation of environmental permitting activities; construction and project management; fabrication and procurement of long-lead process equipment and systems; other government agencies support; and field office program management support.

**D. WORK PERFORMED BY:**

The Project Manager for Alternative Technologies and Approaches is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization involved with research and development of alternative technologies to incineration for the disposal of bulk chemical agents. Neutralization of mustard agent (HD) will be performed at Aberdeen Proving Ground, Maryland by Bechtel Aberdeen. Neutralization of nerve agent (VX) will be performed at Newport Chemical Depot, Indiana by Parsons Infrastructure and Technology. The Product Manager for Non-Stockpile Chemical Materiel is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization involved with the destruction of the non-stockpile chemical materiel. Primary contractors or government agencies executing non-stockpile products are: Science Applications International Corporation, Abingdon, MD; Tennessee Valley Authority, Muscle Shoals, AL; Teledyne Brown Engineering, Huntsville, AL; UXB International, Ashburn, VA; Sandia National Laboratory, Albuquerque, NM; Idaho National Laboratory, Boise, ID; Shaw Environmental, Inc., Boston, MA; Mason & Hangar, Newport, IN; and others. The Program Manager for Assembled Chemical Weapons Alternatives is located at Aberdeen Proving Ground, Maryland, and is the government's technical organization involved with the implementation of alternatives to the baseline incineration process for the demilitarization of assembled



**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

chemical munitions. Neutralization followed by bio-treatment will be performed at Pueblo Chemical Depot, Colorado by the Bechtel Pueblo Team. Neutralization followed by supercritical water oxidation will be performed at Blue Grass Army Depot, Kentucky by the Bechtel Parsons Blue Grass Team.

**E. 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 as designated by Office of the Secretary of Defense (OSD).

**F. OTHER APPROPRIATION FUNDS:**

**Alternative Technologies and Approaches Project:**

Operations and Maintenance, in the Chemical Agents and Munitions Destruction, Army appropriation funds are required for agent disposal and closure operations. Referenced funds are Program Management in FY 2005, Aberdeen Site in FY 2005, and the Newport Site in FY 2005. There are no other funds related to the Alternative Technologies and Approaches research and development effort.

**Non-Stockpile Chemical Materiel Product:**

**BUDGET ACTIVITY 2: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

Procurement funds in the Chemical Agents and Munitions Destruction, Army appropriation funds are required in FY 2005 for Recovered Chemical Warfare Materiel replacement equipment. Operation and Maintenance FY 2005 funds in the Chemical Agents and Munitions Destruction, Army appropriation funds will be used to operate additional treatment systems once fielded. There are no other funds related to the Non-Stockpile Chemical Materiel Project (NSCMP) research and development effort.

**Assembled Chemical Weapons Alternatives:**

Chemical Demilitarization Construction, Defense appropriation funds are required for facility and construction activities for the Pueblo Chemical Agent-Destruction Pilot Plant and the Blue Grass Chemical Agent-Destruction Pilot Plant. Justification is included in a separate book.

**BUDGET ACTIVITY 3: PROCUREMENT**

(In Thousands of Dollars)

<b>FY 2005 Estimate</b>	<b>\$78,980</b>
<b>FY 2004 Budget</b>	<b>\$79,212</b>
<b>FY 2003 Actual</b>	<b>\$127,013</b>

**Purpose and Scope**

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 and the Chemical Stockpile Emergency Preparedness Project equipment. 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 2005 budget request provides for engineering and technical services; equipment modifications for Chemical Agent Munitions Disposal System; equipment procurement and installation in support of closure at Tooele Chemical Agent Disposal Facility; design engineering and procurement of equipment in support of agent operations at the Pine Bluff Chemical Agent Disposal Facility; design engineering and procurement of equipment in support of operations for the Anniston Chemical Agent Disposal Facility; design engineering and procurement of equipment for Umatilla Chemical Agent Disposal Facility; acquisition of Chemical Stockpile Emergency Preparedness Project equipment and protective actions projects; and acquisition of replacement parts for Non-Stockpile Chemical Materiel Project (NSCMP).

**BUDGET ACTIVITY 3: PROCUREMENT**

**Funded Financial Summary**  
**(In Thousands of Dollars)**

	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>
	<b>Actual</b>	<b>Budget</b>	<b>Estimate</b>
Engineering Services	4,259	2,251	1,110
Johnston Atoll Chemical Agent Disposal System	0	0	0
Chemical Agent Munitions Disposal System	520	3,092	2,957
Tooele Chemical Agent Disposal Facility	9,897	15,301	16,514
Anniston Chemical Agent Disposal Facility	9,216	11,284	8,215
Umatilla Chemical Agent Disposal Facility	18,499	9,127	6,012
Pine Bluff Chemical Agent Disposal Facility	11,904	5,086	6,012
Pueblo Chemical Agent Disposal Facility	0	0	0
Blue Grass Chemical Agent Disposal Facility	0	0	0
<b>Subtotal Chemical Stockpile Disposal</b>	<b>54,295</b>	<b>46,141</b>	<b>40,820</b>
Cml Stockpile Emergency Preparedness Project On-Post	620	2,038	636
Cml Stockpile Emergency Preparedness Project Off-Post	72,098	30,513	36,500
<b>Subtotal Cml Stockpile Emer Preparedness Project</b>	<b>72,718</b>	<b>32,551</b>	<b>37,136</b>
Non-Stockpile Chemical Materiel Product- Recovered Chemical Warfare Materiel		520	1,024
Former Production Facilities	0		
<b>Subtotal Non-Stockpile Chemical Materiel Product</b>	<b>0</b>	<b>520</b>	<b>1,024</b>
<b>Total Funded</b>	<b>127,013</b>	<b>79,212</b>	<b>78,980</b>

### **BUDGET ACTIVITY 3: PROCUREMENT**

**Engineering Services:** In FY 2005, funds are required for technical support for On-Site Containers and safety and operational improvements for all operational facilities. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Chemical Agent Munitions Disposal System (CAMDS):** In FY 2005, funds are also required for equipment modifications to support baseline operations and testing. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Tooele Chemical Agent Disposal Facility (TOCDF):** In FY 2005, funds are required for systems contractor to complete procurement and installation of the Mustard Treatment System and associated support equipment. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Anniston Chemical Agent Disposal Facility (ANCDF):** In FY 2005, funds are required for engineering change proposals and equipment upgrades. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Umatilla Chemical Agent Disposal Facility (UMCDF):** In FY 2005, funds are required for engineering change proposals and equipment upgrades. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Pine Bluff Chemical Agent Disposal Facility (PBCDF):** In FY 2005, funds are required for engineering change proposals and equipment upgrades. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post:** In FY 2005, funds are required for scheduled replacement of Army data automation equipment and response equipment. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

### **BUDGET ACTIVITY 3: PROCUREMENT**

**Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-Post:** In FY 2005, funds provide for the replacement of obsolete/non-supportable emergency response equipment and for the completion and sustainment of protective actions projects. Equipment replacement includes equipment to support administrative activities, Emergency Operations Centers, medical support, public outreach/education, and training programs; alert and notification systems; data automation systems; and communications systems. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**Non-Stockpile Chemical Materiel Product (NSCMP) (Recovered Chemical Warfare Materiel):** In FY 2005, funds are required for the procurement of replacement equipment for the EDS and to begin equipment acquisition and installation for process improvements to the Munitions Assessment and Processing System (MAPS). Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

UNCLASSIFIED								
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092				<b>BUDGET ITEM JUSTIFICATION SHEET</b>				DATE February-04
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 3				P-1 ITEM NOMENCLATURE:  Chemical Demilitarization Process Equipment				
	FY03	FY04	FY05					
QUANTITY								
COST (IN MILLIONS)	127.0	79.2	79.0					
<p><b>DESCRIPTION:</b></p> <p>This budget activity provides for the design, fabrication, purchase and installation of all process and support equipment used in the incineration disposal facilities for destroying the unitary chemical agent stockpile. This budget activity also provides for the purchase of equipment and services to support the Chemical Stockpile Emergency Preparedness Project and the Non-Stockpile Chemical Materiel Product.</p> <p><b>JUSTIFICATION:</b></p> <p>The FY 2005 budget procures the following requirements: plant and equipment modifications for Metal Parts Furnace Optimization, Continuous Emissions Monitoring System, Metals Removal Alternatives, Muti-Agent Monitoring; Risk Abatement identified by the Risk Analysis and Mitigation Program; Carbon Tray Assist Mechanism, Mobile Change out Facility, Control System Upgrades, Mustard Charterization, Mine Handling, Mustard Thaw, Agent Storage Capacity, and future engineering changes proposals for Tooele Chemical Disposal Facility, Anniston Chemical Disposal Facility, Umatilla Chemical Disposal Facility, and Pine Bluff Chemical Disposal Facility and closure equipment for Toole Chemical Disposal Facility.</p> <p>FY 2005 procures replacements of obsolete/non-supportable emergency response equipment and for the completion and sustainment of protective actions projects for off-post facilities and replacement of data automation equipment for on-post operations for the Chemical Emergency Preparedness Program.</p> <p>Also, FY 2005 procures equipment, equipment installation, and replacement equipment for the Non-Stockpile Chemical Materiel Product.</p>								
DD Form 2454, Jul 88				P-1 SHOPPING LIST		UNCLASSIFIED		Page 1 of 1 Pages
ITEM NO		PAGE NO 44				EXHIBIT P-40		

UNCLASSIFIED							
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092				<b>WEAPON SYSTEM COST ANALYSIS EXHIBIT</b>		DATE February-04	
APPROPRIATION /BUDGET ACTIVITY Procurement/Budget Activity 3				P-1 ITEM NOMENCLATURE Chemical Demilitarization Equipment			
		MANUFACTURER NAME PLANT CITY/STATE LOCATION		WEAPON MODEL/SERIES/POPULAR NAME Chemical Demilitarization Equipment			
Weapon System Cost Elements	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS					
		FY03 UNIT COST	Quantity TOTAL COST	FY04 UNIT COST	Quantity TOTAL COST	FY05 UNIT COST	Quantity TOTAL COST
1. Engineering Services	N/A		4,259		2,251		1,110
2. Johnston Atoll Cml Agent Disposal System	N/A		0		0		0
3. Chemical Agents and Munitions Disposal Facility	N/A		520		3,092		2,957
4. Tooele Chemical Agent Disposal Facility	N/A		9,897		15,301		16,514
5. Anniston Chemical Agent Disposal Facility	N/A		9,216		11,284		8,215
6. Umatilla Chemical Agent Disposal Facility	N/A		18,499		9,127		6,012
7. Pine Bluff Chemical Agent Disposal Facility	N/A		11,904		5,086		6,012
8. Pueblo Chemical Agent Disposal Facility	N/A		0		0		0
9. Blue Grass Chemical Agent Disposal Facility	N/A		0		0		0
Sub/Total Chemical Stockpile Disposal			54,295		46,141		40,820
10. Chemical Stockpile Emergency Preparedness Project On-Post	N/A		620		2,038		636
11. Chemical Stockpile Emergency Preparedness Project Off-Post	N/A		72,098		30,513		36,500
12. Non-Stockpile Chemical Materiel Product	N/A		0		520		1,024
TOTAL			127,013		79,212		78,980
ITEM NO				PAGE NO 45		UNCLASSIFIED	
						Page 1 of 1 Pages EXHIBIT P-5	



UNCLASSIFIED				DATE		February-04				
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092		<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>								
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 3				P-1 ITEM NOMENCLATURE  Chemical Demilitarization Equipment						
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
Tooele Chemical Agent Disposal Facility Construction, Equipment and Operations Contract 1)			USAOSC	Feb 03 Dec 03 Dec 04	N/A	N/A	9,897 15,301 16,514			
FY 2003	EG&G Inc.	C/CPAF								
FY 2004										
FY 2005										
<u>Total</u>										
FY 2003							9,897			
FY 2004							15,301			
FY 2005							16,514			
REMARKS 1) FY05 procures plant and equipment modifications to complete installation of the Mustard Treatment System and associated support equipment. FY05 also procures improvements to facility safety, improved agent monitoring capabilities, Secondary Waste Processing Equipment, optimized leaker/reject processing, health risk assessment and maximum achievable control technology implementation, safe methodology for processing pressurized ton containers, mustard thaw equipment, treatment of the metals during mustard processing and upgrades to the data acquisition control system.										
P-1 SHOPPING LIST						UNCLASSIFIED		Page 1 of 5 Pages		
ITEM NO			PAGE NO 46					EXHIBIT P-5A		

UNCLASSIFIED										
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092			<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>				DATE February-04			
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 3					P-1 ITEM NOMENCLATURE  Chemical Demilitarization Equipment					
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
Anniston Chemical Agent Disposal Facility Construction, Equipment and Operations Contract 2)										
FY 2003	Morrison Knudsen Corp & Raytheon Engrs. (formerly Westinghouse Electric Company)	C/FFP	U.S. Army Operations Spt Cmd (USAOSC)	Feb 03	N/A	N/A	9,216			
FY 2004				Jun 04			11,284			
FY 2005				Jun 05			8,215			
<u>Total</u>										
FY 2003							9,216			
FY 2004							11,284			
FY 2005							8,215			
REMARKS 1) FY05 procures plant and equipment modifications to complete installation of the Mustard Treatment System and associated support equipment. FY05 also procures improvements to facility safety, improved agent monitoring capabilities, risk abatement requirements, optimized leaker/reject processing, health risk assessment and maximum achievable control technology implementation, safe methodology for processing pressurized ton containers, mustard thaw equipment, treatment of the metals during mustard processing and upgrades to the data acquisition control system.										
P-1 SHOPPING LIST							UNCLASSIFIED		Page 2 of 5 Pages	
ITEM NO			PAGE NO 47				EXHIBIT P-5A			

UNCLASSIFIED											
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092						<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>				DATE February-04	
APPROPRIATION /BUDGET ACTIVITY Procurement/Budget Activity 3						P-1 ITEM NOMENCLATURE Chemical Demilitarization Equipment					
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE	
<u>Umatilla Chemical Agent Disposal Facility</u> Construction, Equipment and Operations Contract 1)											
FY 2003	Raytheon Engrs. and Constructors	C/FFP	USAOSC	Feb 03	N/A	N/A	18,499				
FY 2004				Jun 04			9,127				
FY 2005				Jun 05			6,012				
<u>Total</u>											
FY 2003							18,499				
FY 2004							9,127				
FY 2005							6,012				
REMARKS 1) FY05 procures future design and engineering change proposals required for plant and equipment modification/upgrades. FY 05 also procures equipment and installation for multi-agent continuous air monitoring system; risk abatement requirements; mustard characterization and heel determination; control system upgrades; monitoring system modifications due to change in agent standards; mine-handling conveyor modifications; increase agent storage capacity; and mustard thaw system.											
P-1 SHOPPING LIST							UNCLASSIFIED		Page 3 of 5 Pages		
ITEM NO			PAGE NO 48				EXHIBIT P-5A				

UNCLASSIFIED											
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092						<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>			DATE		February-04
APPROPRIATION /BUDGET ACTIVITY Procurement/Budget Activity 3						P-1 ITEM NOMENCLATURE Chemical Demilitarization Equipment					
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE	
<u>Pine Bluff Chemical Agent Disposal Facility</u>											
<u>Process Design 1)</u>											
FY 2003	Parsons Infrastructure and Technology Group	A/E/CPFF	USAESC,H	Feb 03	N/A	N/A	1,140				
FY 2004				Dec 03			809				
FY 2005				Dec 04			0				
<u>Construction, Equipment and Operations Contract 2)</u>											
FY 2003	Raytheon Engrs. and Constructors	C/CPFF/FFP	USAESC,H USAOSC	Feb 03	N/A	N/A	10,764				
FY 2004				Dec 03			4,277				
FY 2005				Dec 04			6,012				
<u>Total</u>											
FY 2003							11,904				
FY 2004							5,086				
FY 2005							6,012				
REMARKS											
1) FY05 procures future design and engineering change proposals required for plant and equipment modification/upgrades. FY 05 also procures equipment and installation for multi-agent continuous air monitoring system; risk abatement requirements; control system upgrades; carbon filter change out station; monitoring system modifications due to change in agent standards; mine-handling conveyor modifications; and increase agent storage capability.											
P-1 SHOPPING LIST							UNCLASSIFIED		Page 4 of 5 Pages		
ITEM NO			PAGE NO 49				EXHIBIT P-5A				

UNCLASSIFIED										
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092				<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>			DATE February-04			
APPROPRIATION /BUDGET ACTIVITY Procurement/Budget Activity 3				P-1 ITEM NOMENCLATURE Chemical Demilitarization Equipment						
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
<u>Non-Stockpile Chemical Materiel Product (cont)</u>										
<u>Mission Area: Recovered Chemical Warfare Materiel</u>										
<u>Recovered Chemical Warfare Materiel - Munitions Assessment and Processing System (3)</u>										
FY 2003	unknown	C/CPFF	USAOSC	Dec 04	N/A	N/A	0			
FY 2004							0			
FY 2005							766			
<u>Recovered Chemical Warfare Materiel - Explosive Destruction System (4)</u>										
FY 2003	Sandia National Laboratory	C/CPFF	DOE	Dec 03 Dec 04	N/A	N/A	0			
FY 2004							520			
FY 2005							258			
Total										
FY2003							0			
FY2004							520			
FY2005							1,024			
REMARKS 1) FY05 procures Munitions Assessment Processing System pre-planned product improvement (to include hardware upgrades, etc.) and one Explosive Destruction System replacement vessel.										
P-1 SHOPPING LIST							UNCLASSIFIED		Page 5 of 5 Pages	
ITEM NO			PAGE NO 50				EXHIBIT P-5A			