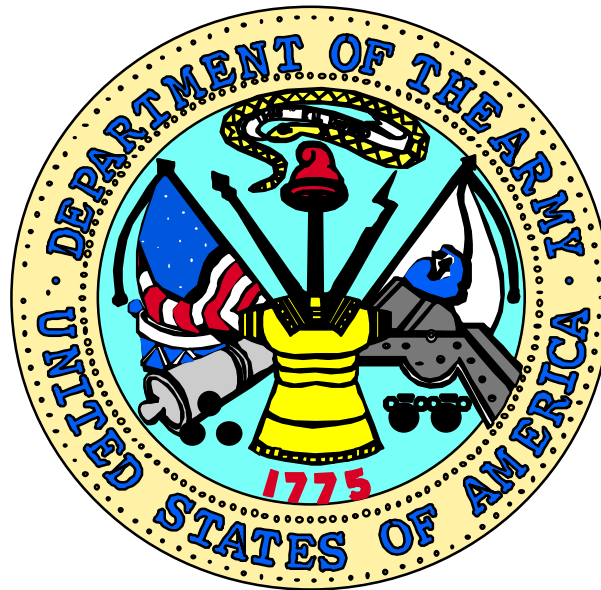


# DEPARTMENT OF THE ARMY

## FY 2001 BUDGET ESTIMATES

SUBMITTED TO CONGRESS, FEBRUARY 2000



CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, ARMY

DEPARTMENT OF ARMY  
BUDGET ESTIMATES FOR FY 2001  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, ARMY

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DEPARTMENT OF ARMY  
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**DEPARTMENT OF ARMY  
JUSTIFICATION OF FY 2001 BUDGET ESTIMATES  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, ARMY**

**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 Department of Defense Authorization Act, 1986 (50 U.S.C. 1521), and for the destruction of other chemical warfare materiel not in the chemical weapon stockpile, \$1,003,500,000 to become available on October 1, 2000, of which \$607,200,000 shall be for Operation and Maintenance, to remain available until September 30, 2001; \$121,900,000 shall be for Procurement, to remain available until September 30, 2003; and \$274,400,000 shall be for Research and Development, to remain available until September 30, 2002.







DEPARTMENT OF ARMY  
JUSTIFICATION OF FY 2001 BUDGET ESTIMATES  
CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, ARMY

APPROPRIATION JUSTIFICATION

(In Thousands of Dollars)

FY 2001 Estimate	\$1,003,500
FY 2000 Budget	\$1,023,705
FY 1999 Actual	\$772,140

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 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 the continued storage of chemical warfare materiel. The Chemical Demilitarization Program supports the international initiatives to rid the world of chemical weapons.

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 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. 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. Even though the disposal completion date has been extended by Public Law to 2007, it is still the Department's policy 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 Project, the Alternative Technologies and Approaches Project, the Assembled Chemical Weapons Assessment Program, and the Cooperative Threat Reduction Project (design and construction of first facility to eliminate the Russian Federation chemical weapon stockpile at Shchuch'ye, Kurgan Region). The Program Manager for Chemical Demilitarization 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 IC), and the Army Acquisition Executive is the milestone decision authority.

Chemical Demilitarization Program elements funded by the Chemical Agents and Munitions Destruction, Army (CAMD,A) appropriation are discussed in detail below. The Cooperative Threat Reduction Project is funded by appropriations for Former Soviet Union Threat Reduction and not within the CAMD,A appropriation.

The Chemical Stockpile Disposal Project (CSDP): The Project Manager for CSDP is responsible for the safe and efficient destruction of the United States' 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 Army and the Federal Emergency Management Agency (FEMA) provide emergency response/preparedness to the communities surrounding the eight continental United States (CONUS) disposal sites, and jointly manage the project. FEMA has total responsibility and accountability for working with State and local governments to enhance the required, off-site 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, and the States to address States' concerns and meet Army Acquisition Program requirements while minimizing the impact on requesting agencies.

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 (formerly Project) Manager for Non-Stockpile Chemical Materiel, under the supervision of the Program Manager for Chemical Demilitarization, was established with the mission to provide centralized management and direction to 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, former production facilities, and buried chemical warfare materiel.

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 and destruction 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 promising 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 December 1996, after careful review, the Army concluded that chemical neutralization followed by biodegradation for APG and chemical neutralization followed by super critical water oxidation for NECD were the most promising alternatives and should proceed to pilot testing. In January 1997, the Department of Defense authorized the Army to proceed with activities to pilot test the chemical treatment-based processes for APG and NECD. Environmental permits have been obtained for APG and for NECD. Contracts have been awarded to complete designs, construct and test chemical treatment-based full-scale pilot processes for the destruction of the two bulk-agent stockpiles.

The Assembled Chemical Weapons Assessment 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)) conduct a demonstration 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 was selected for the Assembled Chemical Weapons Assessment (ACWA) program. The ACWA program manager reports directly to the USD A&T. Public Law 104-208 also suspended construction activities for Pueblo and Blue Grass Chemical Disposal Facilities until 180 days following a report to Congress on the results of the assessment and demonstration. Status reports have been delivered to Congress in

December 1997 and 1998. The FY99 Supplemental Report on the demonstrated technologies was provided to Congress on 1 October 1999. The PM ACWA concluded in the Supplemental Report that two technologies were viable to proceed to pilot testing. Engineering design studies of these two technologies are ongoing and will be completed in December 2000. In addition, the National Research Council (NRC) Report was made public on 24 August 1999. The NRC report assessed the viability of implementing the alternative technologies. The NRC report did not include any of the results from the FY99 ACWA demonstration. However, the NRC is currently reviewing the data and will update their August 1999 report based on their review.

Subsequent public laws (Public Law 105-261 and 106-371) gave the Program Manager the authority to continue developing the successfully demonstrated technologies and to conduct a second demonstration program with the three technologies that were not demonstrated in 1999. The Program Manager for ACWA will develop the environmental documents and design information to build a pilot facility using the two successfully demonstrated technologies - General Atomics and Parsons/Allied Signal. In addition, the Program Manager will demonstrate testing of the second three technologies (AEA Technologies, Teledyne Commodore and Foster Wheeler/Eco Logic).

## **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 2001 financial requirements in support of the Chemical Demilitarization Program, which are budgeted in the Chemical Agents and Munitions Destruction, Army appropriation. In order to provide a clear non-fragmented accounting of the requirements necessary to meet the congressional mandate, this document also provides requirements for the construction of chemical disposal facilities budgeted in the Military Construction, Army appropriation.

In FY 2001, Chemical Stockpile Disposal Project activities will include the following items: complete disposal operations and implement facility closure plans at Johnston Atoll Chemical Agent Disposal System; continue disposal operations at Tooele Chemical Agent

Disposal Facility; continue the Chemical Agent Munitions Disposal System support to the Chemical Stockpile Disposal Project; continue construction and equipment installation of the pilot facilities for testing alternative disposal technologies at Aberdeen Proving Ground, Maryland, and Newport Chemical Depot, Indiana; continue construction and equipment installation at Anniston and Umatilla; continue depot-related reconfiguration of munitions at Anniston Army Depot; continue systemization and training activities at Anniston and Umatilla; continue construction, systemization, and training at Pine Bluff; and continue with steps to implement a path forward for destruction of the chemical weapons stockpiles at Pueblo, Colorado and Blue Grass, Kentucky. The Chemical Stockpile Emergency Preparedness Project activities will continue. The Non-Stockpile Chemical Materiel Product will continue with the following activities: acquisition of equipment in support of on-site destruction of recovered chemical warfare materiel; studies and analyses of non-stockpile disposal technologies; decontamination activities; processing of miscellaneous materials; operation of the Rapid Response System; and construction and operation of the examination/repackaging facility.

### **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 continental United States (CONUS) and on Johnston Atoll in the Pacific. The eight storage installations in CONUS 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.

The Army completed a Final Programmatic Environmental Impact Statement (FPEIS) in January 1988 that culminated in the Record of Decision in February 1988 to destroy the chemical stockpile at the eight chemical storage locations in CONUS utilizing the safest, most environmentally sound and most cost-effective method. A site-specific environmental impact statement, tied to the FPEIS, will be prepared for all eight sites. The individual states, as well as the Environmental Protection Agency and Department of Health and Human Services, will assist the Army as cooperating agencies in the development of these documents.

To date, 17 percent of the total U.S. stockpile (measured in tons of agent) has been destroyed. The first disposal plant, Johnston Atoll Chemical Agent Disposal System (JACADS), began full-scale disposal operations in January 1994. Since then, the Army has safely completed destruction of all nerve agent (GB) and mustard agent items plus nerve agent (VX)-filled M55 rockets. Destruction of the VX-filled 155mm projectiles started in December 1999. As of December 1999, 83 percent of the original chemical agent stockpile stored on the island has been destroyed.

Operation of the first disposal facility in the CONUS, the Tooele Chemical Agent Disposal Facility (TOCDF) at Deseret Chemical Depot, Utah, commenced in August 1996 with the destruction of M55 GB-filled rockets followed by GB-filled one-ton containers. Processing of GB-filled MC-1 bombs was completed in July 1998. TOCDF started multi-munition processing in October 1998 to optimize plant productivity. Disposal of GB-filled M360 projectiles, rockets, and ton containers continues. As of December 1999, TOCDF has processed 27 percent of the original chemical agent stored at Deseret Chemical Depot.

In February 1996, a systems contract to construct and operate the Anniston Chemical Agent Disposal Facility (ANCDF) was awarded, with a "limited notice to proceed" provision, to Westinghouse Electric Corporation. Construction activities commenced in June 1997 upon issuance of the necessary environmental permits by the State of Alabama. As of December 1999, construction is 71 percent complete.

A systems contract for the Umatilla Chemical Agent Disposal Facility (UMCDF) was awarded to Raytheon Demilitarization Company in February 1997; construction activities commenced in June 1997. As of December, 1999, construction is 74 percent complete.

A systems contract for the Pine Bluff Chemical Agent Disposal Facility (PBCDF) was awarded in July 1997 to Raytheon Demilitarization Company with a limited notice to proceed provision. The final Resource Conservation and Recovery Act (RCRA) permit was issued in January 1999 and construction activities commenced immediately. As of December 1999, construction is 14 percent complete.

Construction of both the Pueblo Chemical Agent Disposal Facility (PUCDF) and the Blue Grass Chemical Agent Disposal Facility (BGCDF) is presently on hold due to provisions of

Public Law 104-208 (Omnibus Consolidated Appropriation Act for FY 1997) which suspended construction activities for incineration-based disposal facilities at these sites until 180 days following a report to Congress on the results of the assessment and demonstration of alternative technologies for treatment and disposal of assembled chemical weapons. Environmental permitting activities for incineration-based disposal facilities are continuing in case an incineration approach is selected for implementation. The supplemental report on the demonstrations was provided to Congress on 1 October 1999.

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, the RCRA, the Toxic Substance Control Act, and the Clean Air (CAA) and Clean Water Acts. Additionally, the Army and the Federal Emergency Management Agency 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: 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, the 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, and State officials. The procurement, installation, and sustainment of improved emergency response facilities and systems at the eight CONUS storage sites and their related communities continue. Installation of warning sirens is complete at all eight sites. Improvements to the eight storage sites Emergency Operations Centers (EOCs) are complete. Improvements to civilian communities' EOCs are complete for all ten involved states and complete for most involved local governments. Emergency response communication improvements are complete or near completion at all eight sites (both on-post and in the communities.) Emergency preparedness automation systems have been installed at all sites and software testing and verification has been completed. Upgrade/replacement of on-post and off-post automation software and hardware began in FY 1999 and is programmed through FY 2000.

Non-Stockpile Chemical Materiel: The Non-Stockpile Chemical Materiel Product (NSCMP) Survey and Analysis Report was submitted to Congress in November 1993. An Implementation Plan to accomplish the destruction of non-stockpile chemical materiel was developed in August 1995 and is currently being updated. This plan reflects the approach needed to comply with the requirements of the Chemical Weapons Convention (CWC) and includes the destruction of lethal chemical weapons, agents, and contaminated materiel. The plan provides for development and demonstration of mobile treatment systems for destruction of the non-stockpile chemical munitions that are being stored at active military installations. The plan also provides for the development of treatment systems for the purpose of providing the urgently needed capability for on-site destruction of chemical warfare materiel that may be recovered from suspect burial sites.

The Non-Stockpile Systems Contract was awarded in July 1995 to Teledyne-Brown Engineering of Huntsville, Alabama to decontaminate and dispose of buried chemical warfare materiel across the United States using mobile treatment technologies developed by the Army. The firm will also assist with technical design reviews, equipment testing, and disposal alternatives. The Munitions Management Device (MMD), Version 1 is designed to destroy non-explosively configured chemical weapons recovered from burial sites across the country. The MMD, Version 2 will be designed to destroy explosively configured chemical warfare materiel and bulk quantities of chemical warfare materiel, respectively. The Army is also developing another treatment system called the Explosive Destruction System (EDS). The EDS is intended to manage small lots of munitions requiring immediate destruction or which should not be placed in long-term storage. In 1997, a field deployable Mobile Munitions Assessment System (MMAS) Prototype was delivered to the NSCMP. The MMAS is used to analyze the content and status of munitions to determine the need for and safety of further processing. The Binary Parity mission is 100 percent complete. The former production facility demolition at Aberdeen Proving Ground has been completed except for rubble removal. Disposal effort for the ton containers project at Pine Bluff has been initiated. Additionally, the MMD Prototype and Rapid Response System have completed fabrication and government acceptance testing and are currently undergoing systems testing at Dugway Proving Ground, Utah and Deseret Chemical Depot, Utah, respectively. A prototype EDS is also undergoing testing.



Alternative Technologies and Approaches: The Army completed its evaluation of alternative technologies which could potentially be used in lieu of the baseline incineration process at the two bulk-only chemical agent storage sites. The Army has chosen to pilot test chemical neutralization followed by on-site biodegradation at Aberdeen Proving Ground, Maryland (APG) and chemical neutralization followed by super critical water oxidation (SCWO) at Newport, Indiana (NECD). The systems contractor for APG (Bechtel National) was selected in October 1998 and for NECD (Parsons Infrastructure) in February 1999. RCRA, CAA, and Clean Water Act 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. RCRA and CAA permit applications were submitted to the State of Indiana for the NECD site in April/May 1998 and were received in December 1999. A ground-breaking ceremony for the APG site was held on June 26, 1999 and site preparation work is underway. Site preparation work at NECD will start in 2nd QTR FY 2000. Materials of construction testing for the SCWO reactor to be used at the NECD site is also in progress.

Assembled Chemical Weapons Assessment: The foundation of the Assembled Chemical Weapons Assessment Program has been stakeholder involvement from each of the agent stockpile sites as well as federal, state and tribal regulators, DoD, and national interest groups. The program was established by integrating a three-phased approach: evaluation criteria development, detailed assessment of the alternative technologies using the criteria, and demonstrating three technologies. The criteria were developed by integrating stakeholder and technical requirements. The criteria encompass the destruction of agents (mustard and nerve), explosive materials, metals parts, packaging materials and process wastes. A four-step process was used in evaluating twelve technologies. The four steps included the initial screening (Go/No Go); a detailed evaluation using the demonstration selection criteria to identify any data gaps in the technical proposals; a final assessment using the original proposals and the information provided for the data gap resolution was conducted to select the demonstration contracts; and the demonstration evaluation using the implementation criteria. Three demonstration contracts were awarded to Burns and Roe, General Atomics and Parsons/Allied Signal on 29 July 1998. Demonstrations began in February 1999 and concluded in May. The results of the demonstrations were evaluated against the ACWA Implementation Criteria. The results were provided to the Under Secretary of Defense for Acquisition and Technology and then to

Congress. PM ACWA concluded that two of the three demonstrated technologies, General Atomics (neutralization followed by super critical water oxidation) and Parsons/Allied Signal (neutralization followed by biodegradation), were viable for a pilot-scale facility at Pueblo, CO. One of the three demonstrated technologies (General Atomics) would be viable for a pilot-scale facility at Blue Grass, KY. Public Law 105-261 provided authority to prepare for the immediate implementation of the alternative technologies. The preparation will include the establishment of program requirements, prepare procurement documentation, develop environmental documentation, identify and prepare to meet public outreach and public participation requirement, and prepare to award a contract for the design, construction, and operation of pilot facility. Prior to proceeding with a pilot facility, the Under Secretary of Defense for Acquisition and Technology shall certify to Congress that the alternative technologies are as safe and cost effective for disposing of assembled chemical munitions as is incineration of such munitions and is capable of completing destruction of such munitions on or before the later of the date by which the destruction of the munitions would be completed if incineration were used or by the deadline date mandated by the CWC. In addition, Public Law 106-371 provides direction to demonstrate the remaining three technologies that were not demonstrated within the first demonstration program. The results of the second group on demonstrated technologies will undergo a review process using the Implementation Criteria.

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 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 and Technology) meet not less than twice a year with each commission to receive 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 Operational Verification Testing (OVT)	March 1993
Initiated full-scale disposal operations of nerve agent (GB) rockets	January 1994
Completed Campaigns:	
GB-filled M55 rockets	July 1995
MC1 GB-filled Bombs	November 1995
MK-94 GB-filled bombs	February 1996
155MM GB-filled projectiles	May 1997
105MM GB-filled projectiles	October 1997
M426 (8-inch) GB-filled projectiles	March 1998
Rejected 155MM and 105MM GB-filled projectiles	June 1998
HD-filled M2A1 mortar cartridges	March 1999
155MM HD projectiles	July 1999
155MM Solomon Island Rounds	July 1999
Mustard and nerve agent changeover	December 1999
Began processing M121/M121A/M122 VX-filled projectiles	December 1999 to 2nd Qtr FY 2000
Conduct changeover and process M426 VX-filled (8-inch) projectiles	2nd Qtr FY 2000 to 4th Qtr FY 2000
Conduct changeover and process VX reject projectiles and ton containers	4th Qtr FY 2000
Conduct processing changeover and process VX landmines	4th Qtr FY 2000 to 1st Qtr FY 2001
Begin processing of waste, decommissioning and dismantlement	1st Qtr FY 2001

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

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

Certified OVT completion and started systemization	August 1993
Completed systemization and started operations	August 1996
Processed GB-filled one-ton containers (1st campaign)	January 1997 to December 1997
Completed destruction of GB-filled M55 rockets (1st campaign)	March 1997
Completed destruction MC-1 GB-filled bombs	January 1998 to July 1998
Process GB-filled one-ton containers (2nd campaign)	October 1998 to 2nd Qtr FY 2001
Process GB-filled M55 rockets (2nd campaign)	October 1998 to 1st Qtr FY 2001
Process GB-filled M360 projectiles	October 1998 to 3rd Qtr FY 2001
Process HD-filled 155MM projectiles	3rd Qtr FY 2001 to 2nd Qtr FY 2002

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

**Anniston Chemical Agent Disposal Facility:**

Contract award	February 1996
Construction started	June 1997
Complete construction/systemization	2nd Qtr FY 2002

**Umatilla Chemical Agent Disposal Facility:**

Contract award	February 1997
Construction started	June 1997
Complete construction/systemization	2nd Qtr FY 2002

**Pine Bluff Chemical Agent Disposal Facility:**

Contract award	July 1997
Construction started	January 1999
Complete construction/systemization	4th Qtr FY 2003

**Other Sites:**

Contract Award and Construction Start--	
*Pueblo Chemical Agent Disposal Facility	To be determined
*Blue Grass Chemical Agent Disposal Facility	To be determined

\*These two projects are presently on hold as a result of the Omnibus Consolidated Appropriation Act for FY 1997 (Public Law 104-208).

**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
Contract award-- Aberdeen Pilot Plant	October 1998
Newport Pilot Plant	February 1999
Construction start-- Aberdeen Pilot Plant	3rd Qtr FY 2000
Newport Pilot Plant	3rd Qtr FY 2000
Systemization complete-- Aberdeen Pilot Plant	3rd Qtr FY 2004
Newport Pilot Plant	4th Qtr FY 2003
Decision to proceed from pilot to demil operations-- Aberdeen Pilot Plant	2nd Qtr FY 2005
Newport Pilot Plant	3rd Qtr FY 2004

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

Selected Program Manager/Initial Planning and Study Approach	December 1996
Published Commerce Business Daily Announcement	February 1997
Established Dialogue Group	April 1997
Published Request for Proposal	July 1997
Published Broad Agency Announcement	August 1997
Evaluated Proposals	September 1997 to June 1998
Three Technologies Awarded Demonstration Task Orders	July 1998
Conducted Demonstration Testing	February 1999 to May 1999
Conducted Final Evaluation of Technologies	July 1999
Submitted Supplemental Report to Congress	October 1999
Award three additional demonstration task contracts	2nd Qtr FY2000
Award engineering design study contracts	2nd Qtr FY2000
Begin demonstration testing	3rd Qtr FY2000
Begin engineering design studies testing	3rd Qtr FY2000
Conduct evaluations of technologies	1st Qtr FY2001
Submit supplemental report to Congress	2nd Qtr FY2001

**Major Milestones for the Chemical Stockpile Emergency Preparedness Project (CSEPP) are as follows:**

Joint On-post and Off-post Milestones:

Complete Replacement of Automation Hardware 4th Qtr FY 2000

Conduct CSEPP Exercises at:

Tooele, Utah	4th Qtr FY 2001
Lexington, Kentucky	1st Qtr FY 2001
Anniston, Alabama	2nd Qtr FY 2001
Pine Bluff, Arkansas	2nd Qtr FY 2001
Pueblo, Colorado	2nd Qtr FY 2001
Aberdeen Proving Ground, Maryland	3rd Qtr FY 2001
Newport, Indiana	3rd Qtr FY 2001
Umatilla, Oregon	3rd Qtr FY 2001

On-post Milestones:

Sustainment Phase of the Improved Response Capabilities September 1997

Off-post Milestones:

Sustainment Phase of the Improved Response Capabilities 4th Qtr FY 2001

Complete Over-Pressurization Purchases 4th Qtr FY 2001



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

**Programmatic:**

Submitted Survey and Analysis Report to Congress	November 1993
Developed and Validate Non-Intrusive Munitions Assessment Technology	November 1993
Completed Management Plan	April 1994
Developed Implementation Plan	August 1995
Submitted National Chemical Weapons Destruction Plan to Organization for the Prohibition of Chemical Weapons (OPCW)	April 1997
Submitted Initial Chemical Weapon Production Facility Destruction Plan to OPCW	April 1997

**Development of Assessment and Treatment Systems:**

**Mobile Munitions Assessment System (MMAS):**

Fabrication of MMAS, Phase 2 prototype	November 1997 to November 1999
Initiated Developmental Testing of MMAS, Phase 2	January 1999

**Explosive Destruction System (EDS)**

Completed Fabrication and Initiated Developmental Testing of EDS (1/2 scale prototype)	December 1997
Agent Developmental Testing of EDS (1/2 scale prototype)	November 1999 to 3rd Qtr FY 2000
Complete Fabrication of Full-Scale EDS	2nd Qtr FY 2001
Complete Developmental Testing of Full-Scale EDS	1st Qtr FY 2002

**Rapid Response System (RRS):**

Initiated Design and Fabrication of RRS	October 1998
Initiate Agent Testing of RRS	2nd Qtr FY 2000
Procure RRS (w/modifications) After Completion of Production Acceptance Test and Operational Approval	4th Qtr FY 2000

**Major Milestones for the Non-Stockpile Chemical Materiel Product (continued):**

**Munitions Management Device (MMD):**

Initiated Fabrication of MMD-2 Subsystems for Testing at  
Pine Bluff Arsenal (PBA)  
Completed Final MMD-2 Design  
Conduct Agent Development Testing of MMD-1

June 1999  
September FY 1999  
2nd Qtr FY 2000 to  
4th Qtr FY 2000

**Destruction of Chemical Weapon Munitions (CWM) and Facilities:**

Completed Initial Binary (M687 Projectiles) CW Destruction  
(Parity)  
Complete Binary (M687 Projectile) CW Destruction  
Complete BZ Production Facility Destruction  
Complete Destruction of CW Convention Miscellaneous  
CW Materiel

April 1999  
July 1999  
December 1999  
3rd Qtr FY 2002

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

(In Thousands of Dollars)

<b>FY 2001 Estimate</b>	<b>\$274,400</b>
<b>FY 2000 Budget</b>	<b>\$292,488</b>
<b>FY 1999 Actual</b>	<b>\$171,009</b>

**Purpose and Scope**

This budget activity provides resources for the development of alternative technologies to incineration for disposal of chemical agents and 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 Alternative Technologies and Approaches in FY 2001 to continue equipment procurement activities, continue facility construction and equipment installation, and initiate Quantitative Risk Assessments at APG and NECD. Funds are required for the Non-Stockpile Chemical Materiel Product (NSCMP) in FY 2001 to continue research and development efforts for innovative accessing and chemical treatment processes and initiate efforts for innovative treatment for future burial site remediation, continue testing of the Munitions Management Device (MMD) Version 2, continue research for multi-agent air monitoring systems, complete fabrication and begin testing of the Explosive Destruction System (EDS) to support the recovered chemical materiel mission area. Funds are required for the Assembled Chemical Weapons Assessment (ACWA) Program in FY 2001 for preparation of environmental documentation, finalize facility design, equipment acquisition and installation, and acquisition of carbon filters and ancillary equipment.

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**Special Note Concerning ACWA Program Funding Requirements:** For purposes of this budget submission, it is assumed that ACWA technologies for disposal of chemical weapons stockpiles at Pueblo Chemical Depot, CO and Blue Grass Army Depot, KY will proceed to pilot testing. For this reason, ACWA program funding requirements for FY 2001 are included in the Research and Development (R&D) section of this budget request. **If the ACWA technologies do not proceed to pilot testing, the funding allocated to ACWA requirements will still be required to implement an incineration-based approach to stockpile disposal at these sites.**

BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT

TITLE: DEMILITARIZATION TECHNOLOGY

Funded Financial Summary  
(In Thousands of Dollars)

Title	FY 1999 Actuals	FY 2000 Budget	FY 2001 Estimate
Alternative Technologies and Approaches - Program Management	1,505	3,400	4,249
Alternative Technologies and Approaches - Mission	98,088	152,819	130,926
<b>Subtotal Alternative Tech and Approaches</b>	<b>99,593</b>	<b>156,219</b>	<b>135,175</b>
<b>Non-Stockpile Chemical Materiel Project - Mission</b>	<b>38,593</b>	<b>37,562</b>	<b>60,176</b>
<b>Assembled Cml Weapons Assessment Program</b>	<b>32,823</b>	<b>98,707</b>	<b>79,049</b>
<b>Total</b>	<b>171,009</b>	<b>292,488</b>	<b>274,400</b>

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

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**B. DESCRIPTION OF ELEMENT:**

Alternative Technologies and Approaches Project:

This budget activity provides resources for research and development of alternative technologies to incineration for the disposal of bulk chemical agents. The Project Manager for Alternative Technologies and Approaches has 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 two alternative technologies. One technology is chemical neutralization followed by biological post-treatment for potential destruction of bulk mustard agent at Aberdeen Proving Ground, Maryland. The second technology is chemical neutralization followed by super critical water oxidation for potential destruction of bulk VX agent at Newport Chemical Depot, Indiana. This course of action is consistent with the November 1996 recommendations of the National Research Council and was endorsed by the Defense Acquisition Executive in January 1997.

Non-Stockpile Chemical Materiel Product:

Funds are included for studies and analyses of non-stockpile disposal technologies, for the acquisition of system prototypes, and for the operations of mobile assessment and treatment in support of phase III systems test and evaluation plans.

Assembled Chemical Weapons Assessment Program:

The budget activity provides resources for a second round of demonstration testing of alternative technologies to incineration for the disposal of chemical weapons with explosive components. One of the three technologies utilizes aqueous chemical treatment for destruction of chemical agents and energetics followed by treatment using super critical water oxidation. The second technology uses an electrochemical process to treat

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

the chemical agents and energetics. The third technology uses a solvated electron solution to treat the chemical agents and energetics. In addition, this budget activity also provides resources to develop a pilot design for the two successfully demonstrated technologies, both of which use aqueous chemical treatment for destruction of chemical agents and energetics followed by treatment using super critical water oxidation or biodegradation. This budget activity also provides for preparation of the necessary environmental documentation to support construction of two pilot facilities.

**C. PROGRAM ACCOMPLISHMENTS AND PLANS:**

**FY 1999 Program:**

Alternative Technologies and Approaches Project:

- o Monitored and managed the Alternative Technologies and Approaches mission. The budget of \$1.5 million for program management included \$0.3 million for four workyears of labor, awards, and overtime; \$1.0 million for 10 workyears for matrix support from the U.S. Army Soldier Biological and Chemical Command; \$0.1 million for travel; and \$0.1 million for other support costs which include contractual services, training, materials and supplies, equipment and rentals.
- o Monitored other technologies and provided for public outreach support, contracting support, and Corps of Engineers support (\$5.1 million).
- o Completed the Resource Conservation and Recovery Act (RCRA) permitting process and environmental activities; awarded systems contract and started task to finalize pilot facility design; began equipment acquisition and site preparation and prepared to initiate construction at Aberdeen Proving Ground (APG), Maryland (\$58.4 million).

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

o Continued support of the RCRA permitting process and environmental activities; awarded systems contract and started task to finalize pilot facility design; prepared to initiate construction at Newport Chemical Depot (NECD), Indiana (\$34.6 million).

Non-Stockpile Chemical Materiel Product:

o Completed fabrication of the Mobile Munitions Assessment System (MMAS) Phase II (\$4.7 million).

o Began testing of the Half-Scale Explosive Destruction System (EDS) at Porton Down, UK (\$4.7 million).

o Begin testing of the Munitions Management Device, Version 1 (MMD-1) at Dugway Proving Ground (\$8.1 million).

o Completed design of the Munitions Management Device, Versions 2 (MMD-2) and continued the design of the Pine Bluff Arsenal (PBA) MMD-2 technology-based disposal system (\$6.6 million).

o Began fabrication of the PBA MMD-2 technology-based disposal system (\$8.1 million).

o Completed the MMD-2 Cost as an Independent Variable (CAIV) analysis (\$0.4 million).

o R&D studies/Support (\$6.0 million). This included continued research and development efforts for Air Monitoring studies (\$0.5 million), MMD chemistry requirement studies (\$0.7 million), Tennessee Valley Authority (TVA) technical support (\$4.1 million) and system engineering services (\$0.7 million).



**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

Assembled Chemical Weapons Assessment Program:

- o Continued demonstration efforts, conducted evaluation of the demonstration results using the Implementation Criteria and prepared Congressional Report (\$29.8 million).
- o Prepare Request For Proposal (RFP) for two pilot facilities (\$1.5 million).
- o Initiate the RCRA permitting process and environmental activities to support the construction of two pilot facilities (\$1.5 million).

**FY 2000 Program:**

Alternative Technologies and Approaches Project:

- o Monitor and manage the Alternative Technologies and Approaches mission. The budget of \$3.4 million for program management includes \$2.8 million for 11 core workyears and 13 matrix workyears of labor, awards, overtime and \$0.2 million for travel, and \$0.4 million for other cost which includes contractual services, PCS, training and supplies.
- o Monitor other technologies and provide for public outreach support, and contracting support (\$6.0 million).
- o Finalize plant design, continue environmental activities as needed, complete site preparation activities, and initiate construction at APG (\$70.2 million).
- o Finalize plant design, receive environmental permits, procure equipment, continue site preparation activities, and initiate construction at NECD (\$76.6 million).

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

Non-Stockpile Chemical Materiel Product:

- o Complete testing efforts for the Half-Scale Explosive Destruction System (EDS) (\$2.0 million).
- o Continue design and fabrication of the Full-Scale EDS (\$8.3 million).
- o Complete agent testing of the Munitions Management Device, Version 1 (MMD 1) prototype at Dugway Proving Ground (DPG) (\$9.6 million).
- o Continue fabrication of the MMD-2 technology-based disposal system at Pine Bluff Arsenal (PBA) (8.0 million).
- o Begin development of the Single Chemical Agent Identification Set (CAIS) Access Neutralization System (SCANS) (\$2.1 million).
- o R&D studies/support (\$7.6 million). This includes efforts to identify and develop alternative technologies, other than incineration, for the treatment of NSCMP CWM (\$2.9 million), continued efforts pertaining to decontamination research (\$1.6 million), Air Monitoring Studies (\$0.6 million), Tennessee Valley Authority (TVA) technical support (\$2.0 million), and systems engineering services (\$0.5 million).

Assembled Chemical Weapons Assessment Program:

- o Manage the Assembled Chemical Weapons Assessment program. The budget request of \$2.4 million for management includes \$2.3 million for 15 core workyears of labor, overtime, awards and \$0.1 million for travel.

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

- o Begin the National Environmental Policy Act (NEPA) and the Resource Conservation and Recovery Act (RCRA) activities to support pilot facility construction at Pueblo, CO and Blue Grass, KY (\$4.0 million).
- o Demonstrate the second three technologies, conduct the evaluation of the demonstration results and prepare a supplemental report for Congress (\$41.0 million).
- o Continue testing (Engineering Design Studies) with the successfully demonstrated technologies to develop a 35% design, life cycle cost and schedule, and gather information to support a RCRA permit application (\$51.3 million).

**FY 2001 Program:**

Alternative Technologies and Approaches Project:

- o Monitor and manage the Alternative Technologies and Approaches mission. The budget request of \$4.2 million for program management includes 11 core workyears and 21 matrix workyears of labor, awards, overtime and travel.
- o Monitor other technologies and provide for public outreach support and contracting support, (\$5.1 million).
- o Continue construction work, continue environmental activities as required, continue equipment procurement, begin planning for systemization, and initiate Quantitative Risk Assessment at APG (\$72.6 million).
- o Continue construction work, continue environmental activities as required, continue equipment procurement, begin planning for systemization, and initiate Quantitative Risk Assessment at NECD (\$53.2 million).

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

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Non-Stockpile Chemical Materiel Product:

- o R&D Studies (\$11.4 million). This includes continued research and development efforts for innovative accessing (\$2.0 million), innovative detoxification (\$2.0 million), innovative large burial treatment (\$2.0 million), characterization of unknown chemical weapons materiel(\$1.4 million), and Tennessee Valley Authority (TVA) technical support (\$4.0 million).
- o Continue research and development efforts for the multi-agent air monitoring system (\$2.0 million).
- o Complete testing of MMD-1 modifications (\$5.6 million).
- o Complete design and fabrication of PBA MMD-2 technology-based disposal system and begin testing of the subsystem elements (\$32.3 million).
- o Complete EDS full-scale fabrication (\$1.0 million).
- o Complete EDS DPG testing, start test modifications (\$7.9 million).

Assembled Chemical Weapons Assessment Program:

- o Manage the Assembled Chemical Weapons Assessment program. The budget request of \$2.5 million for management includes \$2.4 million for 15 core workyears of labor, overtime, awards and \$0.1 million for travel.
- o Continue support of the RCRA and NEPA processes at Pueblo, Co and Blue Grass, KY (\$4 million).

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

- o Conduct Engineering Design Studies for the second three technologies to develop a 35% design, life cycle cost and schedule, and gather information to support a RCRA permit application (\$50 million).
- o Award a systems contract to finalize design, and begin equipment acquisition for a pilot facility in Pueblo, CO (\$22.5 million).

**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. Materials of construction testing and engineering scale testing necessary to support environmental design activities, will be performed by General Atomics as a subcontractor to Stone and Webster Engineering Corporation. Pilot facility tests, when executed, will be performed for mustard (HD) at Aberdeen Proving Ground, Maryland by Bechtel National and for nerve agent (VX) at Newport Chemical Depot, Indiana by Parsons Infrastructure. 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. The contract for the concept and design efforts for the Munitions Management Devices (MMDs) was awarded to Science Applications International Corporation. The Program Manager for Assembled Chemical Weapons Assessment is located at the U.S. Army Soldier Biological and Chemical Command, Aberdeen Proving Ground, Maryland and is the government's technical organization involved with the identification and demonstration of not less than two alternatives to the baseline incineration process for the demilitarization of assembled chemical munitions.

**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

**BUDGET ACTIVITY 1: RESEARCH AND DEVELOPMENT**

**TITLE: DEMILITARIZATION TECHNOLOGY**

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:

Military Construction, Army appropriations will be used for construction activities. There are no other funds related to the Alternative Technologies and Approaches research and development effort.

Non-Stockpile Chemical Materiel Product:

Chemical Agents and Munitions Destruction, Army Procurement, and Operation and Maintenance funds will be used to purchase additional treatment systems and operate those systems once fielded.

Assembled Chemical Weapons Assessment Program:

Military Construction, Army appropriations will be used for construction activities. There are no other funds related to this research and development effort.

**BUDGET ACTIVITY 2: PROCUREMENT**

(In Thousands of Dollars)

<b>FY 2001 Estimate</b>	<b>\$121,900</b>
<b>FY 2000 Budget</b>	<b>\$189,511</b>
<b>FY 1999 Actual</b>	<b>\$114,484</b>

**Purpose and Scope**

This budget activity provides for the procurement of all process and support equipment used in the disposal facilities for destroying the unitary chemical stockpile; the Chemical Stockpile Emergency Preparedness Project equipment; and the Non-Stockpile Chemical Materiel Product 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 2001 budget request provides for process design services for Anniston, Umatilla, and Pine Bluff Chemical Agent Disposal Facilities (\$5.6 million); engineering and technical services (\$13.0 million); equipment modifications for Chemical Agent Munitions Disposal System (\$2.7 million); equipment for mustard agent conditioning at Tooele Chemical Agent Disposal Facility (\$4.1 million); equipment for the systems contract for construction and installation at the Umatilla and Pine Bluff Chemical Agent Disposal Facilities (\$79.8 million); acquisition of Chemical Stockpile Emergency Preparedness Project equipment (\$0.6 million); and non-stockpile long-lead-time equipment (\$16.2 million).

For FY 2001, it should be noted that if incineration is selected for Pueblo and Blue Grass Army Depots, funding will need to be transferred from the Research and Development line for the Assembled Chemical Weapons Assessment Program to the Procurement lines for Pueblo and Blue Grass.

**BUDGET ACTIVITY 2: PROCUREMENT**

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

	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>
	<b><u>Actuals</u></b>	<b><u>Budget</u></b>	<b><u>Estimate</u></b>
Engineering Services	6,746	13,707	12,961
Johnston Atoll Chemical Agent Disposal System	13,553	972	0
Chemical Agent Munitions Disposal System	2,704	0	2,669
Tooele Chemical Agent Disposal Facility	3,509	13,092	4,053
Anniston Chemical Agent Disposal Facility	18,430	36,323	1,780
Umatilla Chemical Agent Disposal Facility	38,588	35,736	21,849
Pine Bluff Chemical Agent Disposal Facility	12,480	49,375	61,790
Pueblo Chemical Agent Disposal Facility	0	0	0
Blue Grass Chemical Agent Disposal Facility	0	0	0
<b>Subtotal Chemical Stockpile Disposal Project</b>	<b>96,010</b>	<b>149,205</b>	<b>105,102</b>
Cml Stockpile Emergency Preparedness Project On-Post	1,188	1,730	584
Cml Stockpile Emergency Preparedness Project Off-Post	13,067	33,997	0
<b>Subtotal Cml Stockpile Emer Preparedness Project</b>	<b>14,255</b>	<b>35,727</b>	<b>584</b>
<b>Subtotal Non-Stockpile Chemical Materiel Project</b>	<b>4,219</b>	<b>4,579</b>	<b>16,214</b>
<b>Total</b>	<b>114,484</b>	<b>189,511</b>	<b>121,900</b>



## BUDGET ACTIVITY 2: PROCUREMENT

### Department of the Army Justification of Funds Required

Engineering Services: In FY 2001, funds in the amount of \$13.0 million are required for equipment acquisition services (\$11.5 million); chemical stockpile disposal project enhancements (\$0.8 million); and design engineering services (\$0.7 million).

Johnston Atoll Chemical Agent Disposal System (JACADS): There are no budgeted requirements for FY 2001.

Chemical Agent Munitions Disposal System (CAMDS): Funding of \$2.7 million is budgeted in FY 2001 for various plant and equipment modifications required to support baseline testing requirements.

Tooele Chemical Agent Disposal Facility (TOCDF): In FY 2001, funds in the amount of \$4.0 million are required for systems contractor major replacement parts and equipment required due to wear, breakage, or design changes. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/ description of requirements.

Anniston Chemical Agent Disposal Facility (ANCDF): In FY 2001, funds in the amount of \$1.8 million are required for site specific design engineering. Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

Umatilla Chemical Agent Disposal Facility (UMCDF): In FY 2001, funds in the amount of \$21.8 million are required for site specific design engineering (\$2.1 million) and systems contractor equipment installation (\$19.7 million). Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

Pine Bluff Chemical Agent Disposal Facility (PBCDF): In FY 2001, funds in the amount of \$61.8 million are required for site specific design engineering (\$1.7 million) and systems contractor equipment installation (\$60.1 million). Refer to Exhibit P-5A (Procurement History and Planning) for further delineation/description of requirements.

**BUDGET ACTIVITY 2: PROCUREMENT**

**Department of the Army  
Justification of Funds Required**

Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post: In FY 2001, funds in the amount of \$0.6 million are required for scheduled replacement of minor equipment.

Non-Stockpile Chemical Materiel Product (NSCMP): The FY 2001 budget request of \$16.2 million consists of the following activities: purchase initial Explosive Destruction System (EDS) support equipment for fielding (\$0.3 million), Rapid Response System (RRS) modifications (\$3.9 million), and initiate acquisition of the Munitions Assessment and Processing System (MAPS) (\$12.0 million).

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REPORTS CONTROL SYMBOL DD-COMP(AR) 1092		<b>BUDGET ITEM JUSTIFICATION SHEET</b>					DATE Feb-00	
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 2				P-1 ITEM NOMENCLATURE:  Chemical Demilitarization Process Equipment				
		FY99	FY00	FY01	FY02	FY03	FY04	FY05
QUANTITY								
COST (IN MILLIONS)		114.5	189.5	121.9	58.6	28.5	30.6	19.1
<p><b>DESCRIPTION:</b></p> <p>This budget activity provides for the purchase and installation of equipment for disposal facilities to be used for destroying the unitary chemical agent stockpile. This budget activity also provides for the purchase of equipment to support the Chemical Stockpile Emergency Preparedness Project (CSEPP) and the Non-Stockpile Chemical Materiel Product (NSCMP).</p> <p>The FY 2001 budget request provides for process design services for Anniston, Umatilla, and Pine Bluff Chemical Agent Disposal Facilities; equipment modifications/replacement for Chemical Agent Munitions Disposal System and the Tooele Chemical Agent Disposal facility; systems contractor equipment acquisition/installation for Umatilla and Pine Bluff Chemical Agent Disposal Facilities; acquisition of CSEPP equipment; engineering and technical services; and non-stockpile equipment.</p>								
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REPORTS CONTROL SYMBOL  
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**WEAPON SYSTEM COST ANALYSIS EXHIBIT**

DATE Feb-00

APPROPRIATION /BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE

Procurement/Budget Activity 2

Chemical Demilitarization Equipment

MANUFACTURER NAME  
PLANT CITY/STATE LOCATION

WEAPON MODEL/SERIES/POPULAR NAME

SEE P-5A

Chemical Demilitarization Equipment

Weapon System Cost Elements	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS							
		FY 99		FY 00		FY 01			
		UNIT COST	Quantity TOTAL COST	UNIT COST	Quantity TOTAL COST	UNIT COST	Quantity TOTAL COST	UNIT COST	Quantity TOTAL COST
1. Engineering Services	N/A		6,746		13,707				12,961
2. Johnston Atoll Cml Agent Disposal Facility	N/A		13,553		972				0
3. Chemical Agents and Munitions Disposal Facility	N/A		2,704		0				2,669
4. Tooele Chemical Agent Disposal Facility	N/A		3,509		13,092				4,053
5. Anniston Chemical Agent Disposal Facility	N/A		18,430		36,323				1,780
6. Umatilla Chemical Agent Disposal Facility	N/A		38,588		35,736				21,849
7. Pine Bluff Chemical Agent Disposal Facility	N/A		12,480		49,375				61,790
Sub/Total Chemical Stockpile Disposal			96,010		149,205				105,102
8. Chemical Stockpile Emergency Preparedness Project On-Post	N/A		1,188		1,730				584
9. Chemical Stockpile Emergency Preparedness Project Off-Post	N/A		13,067		33,997				0
10. Non-Stockpile Chemical Materiel Product	N/A		4,219		4,579				16,214
<b>TOTAL</b>			<b>114,484</b>		<b>189,511</b>				<b>121,900</b>

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EXHIBIT P-5

REPORTS CONTROL SYMBOL

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**BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT**

DATE

Feb-00

APPROPRIATION /BUDGET ACTIVITY

Procurement/Budget Activity 2

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 Process Design 1)										
FY 1999 FY 2000 FY 2001	Ralph M. Parsons Company	A/E/CPFF	U. S. Army Engineering & Support Center, Huntsville (USAESC,H)	Jul 86	N/A	N/A	0 0 0	N/A	N/A	
Equipment Acquisition and Installation Equipment Installation Contract Annex G (Major Process Equipment ) 2)										
FY 1999 FY 2000 FY 2001	Raytheon Engrs Construction	C/Option/ CPFF/FFP	USAESC,H	Sep 84	N/A	N/A	0 0 0	Yes	No	
Equipment Acquisition Contract 3)										
FY 1999 FY 2000 FY 2001	Bechtel National Inc	C/CPFF/FFP	USAESC,H	Nov 88	N/A	N/A	2,509 10,500 0	Yes	No	

REMARKS

- 1) There are no budgeted requirements for FY 2001.
- 2) There are no budgeted requirements for FY 2001.
- 3) There are no budgeted requirements for FY 2001.

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**BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT**

DATE

Feb-00

APPROPRIATION /BUDGET ACTIVITY

Procurement/Budget Activity 2

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 (Cont'd)										
Construction, Equipment and Operations Contract 4)										
FY 1999	EG&G Inc.	C/CPAF	USAESC,H	Sep 89	N/A	N/A	1,000			
FY 2000							2,592			
FY 2001							4,053			
Total										
FY 1999							3,509			
FY 2000							13,092			
FY 2001							4,053			

REMARKS

4) This is a systems contract. Funds requested are to purchase major replacement parts and equipment as needed during FY 2001.

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REPORTS CONTROL SYMBOL DD-COMP(AR) 1092				<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>			DATE		Feb-00	
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 2				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 Process Design 1)										
FY 1999 FY 2000 FY 2001	Ralph M. Parsons Company	A/E/CPFF	USAESC,H	Jul 86	N/A	N/A	3,950 0 1,780			
Equipment Acquisition and Installation Equipment Installation Contract Annex G (Major Process Equipment ) 2)										
FY 1999 FY 2000 FY 2001	Raytheon Engrs Construction	C/Option/ CPFF/FFP	USAESC,H	Sep 84	N/A	N/A	700 0 0			
Equipment Acquisition Contract 3)										
FY 1999 FY 2000 FY 2001	Bechtel National Inc	C/CPFF/FFP	USAESC,H	Nov 88	N/A	N/A	890 0 0			
REMARKS 1) The FY 2001 funding provides for continued Phase II process design engineering updates, review of systems contractor support and vendor support, and an on-site field office staff.  2) There are no budgeted requirements for FY 2001.  3) There are no budgeted requirements for FY 2001.										
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**BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT**

DATE

Feb-00

APPROPRIATION /BUDGET ACTIVITY

Procurement/Budget Activity 2

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 (Cont'd) Construction, Equipment and Operations Contract 4)										
FY 1999	Westinghouse Elect Company	C/FFP	U.S. Army Industrial Operations Command (USAIOC)	Feb 96	N/A	N/A	12,890			
FY 2000							36,323			
FY 2001							0			
Total										
FY 1999							18,430			
FY 2000							36,323			
FY 2001							1,780			

REMARKS

4) There are no budgeted requirements for FY 2001.



UNCLASSIFIED										
REPORTS CONTROL SYMBOL DD-COMP(AR) 1092				<b>BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT</b>			DATE		Feb-00	
APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 2				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
Umatilla Chemical Agent Disposal Facility Process Design 1)										
FY 1999 FY 2000 FY 2001	Ralph M. Parsons Company	A/E/CPFF	USAESC,H	Jul 86	N/A	N/A	3,480 0 2,100			
Equipment Acquisition and Installation Equipment Installation Contract Annex G (Major Process Equipment ) 2)										
FY 1999 FY 2000 FY 2001	Raytheon Engrs Construction	C/Option/ CPFF/FFP	USAESC,H	Sep 84	N/A	N/A	1,600 4,200 0			
Equipment Acquisition Contract 3)										
FY 1999 FY 2000 FY 2001	Bechtel National Inc	C/CPFF/FFP	USAESC,H	Nov 88	N/A	N/A	0 0 0			
REMARKS 1) The FY 2001 funding provides for continued Phase II design engineering updates, review of systems contractor support and vendor support, and an on-site field office staff.  2) There are no budgeted requirements for FY 2001.  3) There are no budgeted requirements for FY 2001.										
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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
Umatilla Chemical Agent Disposal Facility (Cont'd)										
Construction, Equipment and Operations Contract 4)										
FY 1999	Raytheon Demilitarization Company	C/FFP	USAIOC	Feb 97	N/A	N/A	33,508			
FY 2000							31,536			
FY 2001							19,749			
Total										
FY 1999							38,588			
FY 2000							35,736			
FY 2001							21,849			

REMARKS

4) This is a systems contract for construction, acquisition and installation of equipment and disposal operations. FY 2001 funds are for installation of process equipment.

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P-1 ITEM NOMENCLATURE

Procurement/Budget Activity 2

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
Pine Bluff Chemical Agent Disposal Facility Process Design 1)										
FY 1999 FY 2000 FY 2001	Ralph M. Parsons Company	A/E/CPFF	USAESC,H	Jul 86	N/A	N/A	4,739 2,410 1,700			
Equipment Acquisition and Installation Equipment Installation Contract Annex G (Major Process Equipment ) 2)										
FY 1999 FY 2000 FY 2001	Raytheon Engrs Construction	C/Option/ CPFF/FFP	USAESC,H	Sep 84	N/A	N/A	1,375 4,200 0			
Equipment Acquisition Contract 3)										
FY 1999 FY 2000 FY 2001	Bechtel National Inc	C/CPFF/FFP	USAESC,H	Nov 88	N/A	N/A	3,890 50 0			

REMARKS

- 1) The FY 2001 funding provides for continued Phase II process design engineering updates, review of systems contractor support and vendor support, and an on-site field office staff.
- 2) There are no budgeted requirements for FY 2001
- 3) There are no budgeted requirements for FY 2001.

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Procurement/Budget Activity 2

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
Pine Bluff Chemical Agent Disposal Facility (Cont'd) Construction, Equipment and Operations Contract 4)										
FY 1999	Raytheon Demilitarization Company	C/FFP	USAIOC	Jul 97	N/A	N/A	2,476			
FY 2000							42,715			
FY 2001							60,090			
Total										
FY 1999							12,480			
FY 2000							49,375			
FY 2001							61,790			

REMARKS

4) This is a system contract for construction, acquisition and installation of equipment and disposal operations. Procurement of items under this contract include acquisition of non-standard equipment and installation of process equipment during FY 2001. Non-standard equipment items include air compressors, boilers, water treatment systems, and bulk chemical storage systems.

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Procurement/Budget Activity 2

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
Non-Stockpile Chemical Materiel Project PBA Assessment Facility EQ 1)										
FY 1999	Idaho National Engineering and Environmental Laboratory	C/CPFF	DOE	Mar 99	N/A	N/A	2,174			
FY 2000							3,000			
FY 2001							0			
Rapid Response System (RRS) 2)										
FY 1999	Teledyne Brown Engineering	C/CPFF	USAIOC	Feb 96	N/A	N/A	2,046			
FY 2000							1,558			
FY 2001							3,914			

REMARKS

- 1) There are no budgeted requirements for FY 2001.
- 2) The FY 2001 funding is needed for RRS modifications resulting from testing and the purchase of RRS-related environmental and monitoring equipment.

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APPROPRIATION /BUDGET ACTIVITY  Procurement/Budget Activity 2				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
Munitions Assessment & Processing System (MAPS) (3)										
FY 1999	Unknown	C/CPFF	USAIOC		N/A	N/A	0			
FY 2000							0			
FY 2001							12,000			
Explosive Destruction System (EDS) (4)										
FY 1999	Sandia	C/CPFF	DOE		N/A	N/A	0			
FY 2000							0			
FY 2001							300			
Total										
FY 1999							4,220			
FY 2000							4,558			
FY 2001							16,214			
REMARKS										
3) The FY 2001 funding is needed for acquisition of Munitions Assessment and Processing System.										
4) The FY 2001 funding is needed to purchase initial support equipment for fielding the Explosive Destruction System.										
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**BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE**

**Department of the Army  
Justification of Funds Required**

(In Thousands of Dollars)

<b>FY 2001 Estimate</b>	<b>\$607,200</b>
<b>FY 2000 Budget</b>	<b>\$541,706</b>
<b>FY 1999 Actual</b>	<b>\$486,647</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) 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 2001 include: program management for the Chemical Demilitarization Program and Chemical Stockpile Disposal Project (\$23.1 million); program and integration support including public affairs, safety and quality assurance (\$21.9 million); program oversight, environmental and engineering services (\$26.2 million); completion of munitions processing and start of closure operations at the Johnston Atoll Chemical Agent Disposal System (JACADS) (\$127.5 million); continuation of Chemical Agent Munitions Disposal System testing to support the Chemical Stockpile Disposal Project (\$25.6 million); continuation of training activities at the Chemical Demilitarization Training Facility (\$8.8 million); continuation of disposal operations at Tooele Chemical Agent Disposal Facility (\$100.5 million); environmental support, training, systemization activities and munitions reconfiguration activities at Anniston (\$62.5 million); systemization activities, training, and environmental support at Umatilla

**BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE**

**Department of the Army  
Justification of Funds Required**

(\$56.3 million); systemization activities (conducted concurrently with construction), depot support, cooperative agreements with the State of Arkansas, and field office support at Pine Bluff (\$40.5 million). In addition, the budget provides for continued support of emergency response personnel at the State and local levels of government and at the chemical stockpile storage installations (\$66.7 million); and Non-Stockpile Chemical Materiel requirements for destroying chemical-warfare related materiel (\$47.5 million).



**BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE**

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

	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>
	<b>Actuals</b>	<b>Budget</b>	<b>Estimate</b>
<b>Program Manager for Cml Demil--Program Management</b>	<b>6,899</b>	<b>8,905</b>	<b>9,387</b>
Project Manager for Cml Stockpile Disposal--Program Mgmt	10,933	13,175	13,735
Program and Integration Support	15,436	19,326	21,936
Program Oversight, Environmental & Engineering Services	16,771	25,933	26,214
Johnston Atoll Chemical Agent Disposal System	126,534	127,614	127,467
Chemical Agent Munitions Disposal System	19,823	25,157	25,592
Chemical Demilitarization Training Facility	3,918	8,989	8,794
Tooele Chemical Agent Disposal Facility	91,307	92,681	100,492
Anniston Chemical Agent Disposal Facility	31,207	49,650	62,548
Umatilla Chemical Agent Disposal Facility	21,686	46,268	56,323
Pine Bluff Chemical Agent Disposal Facility	15,652	26,861	40,513
Pueblo Chemical Agent Disposal Facility	515	439	0
Blue Grass Chemical Agent Disposal Facility	563	414	0
<b>Subtotal Chemical Stockpile Disposal Project</b>	<b>354,345</b>	<b>436,507</b>	<b>483,614</b>
Cml Stockpile Emergency Preparedness Project On-Post--Prgm Mgmt	1,511	1,419	1,479
Cml Stockpile Emergency Preparedness Project On-Post--Mission	27,195	26,866	30,536
Cml Stockpile Emergency Preparedness Project Off-Post--Mission	28,698	29,343	34,655
<b>Subtotal Chemical Stockpile Emergency Preparedness Proj</b>	<b>57,404</b>	<b>57,628</b>	<b>66,670</b>
Non-Stockpile Chemical Materiel--Program Management	3,582	5,481	5,731
Non-Stockpile Chemical Materiel--Mission	63,428	32,334	41,798
<b>Subtotal Non-Stockpile Chemical Materiel Project</b>	<b>67,010</b>	<b>37,815</b>	<b>47,529</b>
Inouye Leave Program	989	851	0
<b>Total</b>	<b>486,647</b>	<b>541,706</b>	<b>607,200</b>

### BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE

#### Department of the Army Justification of Funds Required

##### Program Manager for Chemical Demilitarization (PM Cml Demil)--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 2001 budget request of \$9.4 million includes \$3.7 million for 47 workyears of labor, awards, overtime, and summer hire program; \$0.5 million for base support; and \$5.2 million for other support costs which includes travel, transportation, and contractual services such as matrix support from the U.S. Army Soldier Biological and Chemical Command (SBCCOM) (37 workyears), training, materials and supplies, equipment and rentals.

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.

The FY 2001 budget request of \$13.7 million includes \$4.1 million for 42 workyears of labor, awards, overtime and summer hire program; \$0.5 million for base support; and \$9.1 million for other support costs which includes travel, transportation and contractual services such as matrix support from SBCCOM (68 workyears), training, materials and supplies, equipment and rentals.

Program and Integration Support: The Program and Integration Support Contract provides assistance to the Army in program integration, management integration and oversight in all phases and areas of the Chemical Demilitarization Program. The contractor will perform programmatic studies and evaluations, collect and collate data, as well as prepare technical and management reports.

### **BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE**

#### **Department of the Army Justification of Funds Required**

The FY 2001 budget request of \$21.9 million includes \$0.6 million for safety; \$3.1 million for medical support, materiel management and quality functions; \$8.6 million for program integration efforts such as program reporting, project monitoring, decision support, life-cycle-cost database support, and information management and support; \$5.6 million for public outreach offices and public affairs initiatives such as videos, newsletters, publicity and exhibits; \$2.2 million for implementation of lessons learned; and \$1.8 million for agent monitoring and environmental support.

Program Oversight, Environmental and Engineering Services: These programmatic support activities include those costs which are not directly or economically attributable to a single demilitarization site and are associated with government performers or contractors other than the Program and Integration Support Contract. The main activities included are: program oversight by the Department of Health and Human Services and the National Academy of Sciences; preparation of environmental impact statements by Oak Ridge National Laboratory; acquisition of substitute munitions for use in equipment prove-out, preoperational test and training exercises; administrative and technical support to include design and other programmatic costs of the program.

The FY 2001 budget request of \$26.2 million includes \$2.9 million for engineering services in support of design; \$0.5 million for environmental support, litigation support, and National Environmental Policy Act documentation; \$6.1 million for contracting support from the U.S. Army Corps of Engineers, Huntsville Division, the U.S. Army Industrial Operations Command, and the U.S. Army Materiel Command; \$7.4 million for substitute munitions; and \$7.3 million for program oversight, studies and evaluations; \$0.2 million for demilitarization support; and \$1.8 million for stockpile surveillance.

Johnston Atoll Chemical Agent Disposal System (JACADS): This item includes all funding required to complete operations and initiate closure of the chemical demilitarization facility located on Johnston Atoll. Full-scale demilitarization operations were initiated

### BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE

#### Department of the Army Justification of Funds Required

in January 1994, after the successful completion of operational verification testing, and will continue through 4th Qtr FY 2000. Facility closure will take place during FY 2001.

The FY 2001 budget request of \$127.5 million includes operating contractor efforts (\$101.5 million) consisting of \$81.9 million for 510 workyears of labor and potential award fees; and \$19.6 million for materials, supplies and other non-labor costs. The budget request also includes \$22.2 million for base support activities and utilities, \$2.3 million for site support studies and evaluations of secondary waste treatment systems, and \$1.5 million for environmental support for projects/studies.

Chemical Agent Munitions Disposal System (CAMDS): This prototype facility, designed to demonstrate and evaluate demilitarization processes and equipment which will be used to dispose of the entire chemical stockpile, will continue to support the Chemical Stockpile Disposal Project.

The FY 2001 budget request of \$25.6 million includes \$8.7 million for 156 workyears of labor for the CAMDS work force and \$11.3 million for other support costs which include materials/supplies, awards, travel, training, and contracts; \$5.0 million for base support; \$0.2 million for other government agency support; and \$0.4 million for environmental support.

Chemical Demilitarization Training Facility (CDTF): The one-of-a-kind CDTF was constructed by General Physics Corporation of Columbia, Maryland, at the Edgewood Area of Aberdeen Proving Ground, Maryland. This training facility, which was completed in June 1991, has been and will continue to be used to train both government and contractor personnel for all nine chemical stockpile disposal facilities and Russian interns on chemical warfare disposal. The International Association for Continuing Education and Training (IACET) named General Physics Corporation an IACET "Certified Provider" for its CDTF courses. The principal cost element of this project is the cost of CDTF contractor instructors and support personnel to maintain the training facility.

### BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE

#### Department of the Army Justification of Funds Required

The FY 2001 budget request of \$8.8 million includes \$8.3 million for 143 workyears for training contractor personnel efforts consisting of project management controls, lesson plan preparation and training operations; \$0.4 million for base support and \$0.1 million for contracting support.

Tooele Chemical Agent Disposal Facility (TOCDF): The FY 2001 budget request of \$100.5 million includes systems contractor efforts during operations (\$82.1 million) consisting of \$46.4 million for 711 workyears of labor and \$35.7 million for materials, supplies and other non-labor and waste disposal costs. The budget request also includes \$11.8 million for general base support activities, utilities and munitions movement labor (64 workyears); \$0.5 million for contract administrative services; \$2.8 million for site support, studies and evaluations; and \$3.3 million for environmental permits and fees and the cooperative agreement with the State of Utah.

Anniston Chemical Agent Disposal Facility (ANCDF): The FY 2001 budget request of \$62.5 million includes \$54.4 million for labor costs for systemization, training, and project management by the systems contractor (514 workyears); \$4.1 million for base support activities which include manpower requirements (42 workyears) for munitions reconfiguration and depot support; \$1.4 million for contract administrative services; \$0.8 million for environmental permitting support and fees; \$1.8 million for safety assessments and site support.

Umatilla Chemical Agent Disposal Facility (UMCDF): The FY 2001 budget request of \$56.3 million includes \$47.2 million for systems contractor efforts consisting of systemization involving 382 workyears of labor; \$5.2 million for base support activities; \$0.4 million for contract administrative services; \$1.5 million for studies and evaluations to include the Program and Integration Support Contract services and safety activities; \$0.8 million for environmental activities; and \$1.2 million for the Cooperative Agreement with the Confederated Tribes of the Umatilla Indian Reservation.

Pine Bluff Chemical Agent Disposal Facility (PBCDF): The FY 2001 budget request of

### BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE

#### Department of the Army Justification of Funds Required

\$40.5 million includes \$28.2 million for systems contractor efforts consisting of systemization and training activities involving 200 workyears of labor; \$6.9 million for general base support activities and utilities; \$2.1 million for contract administration; \$2.6 million site support, studies and evaluations; and \$0.7 million for environmental support and fees.

Pueblo Chemical Agent Disposal Facility (PUCDF): There are no budgeted requirements for FY 2001; however, if incineration is selected for Pueblo Army Depot, funding will need to be transferred from the Research and Development line for the Assembled Chemical Weapons Assessment Program to the Operation and Maintenance line for Pueblo.

Blue Grass Chemical Agent Disposal Facility (BGCDF): There are no budgeted requirements for FY 2001; however, if incineration is selected for Blue Grass Army Depot, funding will need to be transferred from the Research and Development line for the Assembled Chemical Weapons Assessment Program to the Operation and Maintenance line for Blue Grass.

Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post--Program Management: The FY 2001 budget request of \$1.5 million includes \$1.2 million for 13 workyears of labor, awards and overtime; \$0.3 million for travel, transportation, contractual services, training, rentals, materials, and supplies.

Chemical Stockpile Emergency Preparedness Project (CSEPP) On-Post--Mission: The FY 2001 budget request of \$30.5 million provides continued support of emergency planner/response personnel for the eight chemical stockpile storage installations (\$12.1 million); on-post training and annual joint exercises (\$0.9 million); administration, contracts, and operations and maintenance of on-post alert and notification systems, Emergency Operation Centers, Joint Information Centers, communications systems, and emergency response systems (\$8.0 million); technical support for operations and maintenance of the emergency management system automation hardware and software at all on-post and off-post Emergency Operations Centers (\$7.4 million); Army public education and awareness programs

### BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE

#### Department of the Army Justification of Funds Required

(\$0.9 million); and Army travel and transportation (\$0.6 million). The budget request also includes \$0.6 million for Army technical support and expertise to assist FEMA in sustaining off-post chemical agent emergency preparedness procedures for chemical agent training in emergency medical response to chemical agent incidents/accidents and for chemical agent specific equipment and systems support such as agent testing personal protection, and detection/monitoring.

Chemical Stockpile Emergency Preparedness Project (CSEPP) Off-post--Mission: The FY 2001 budget request of \$34.7 million provides continued support of emergency planner/response personnel for FEMA, State and local governments (\$12.2 million); off-post training and exercises and annual joint exercises (\$2.8 million); administration and maintenance of off-post alert and notification systems, Emergency Operation Centers, Joint Information Centers, communications, protective action capabilities, and emergency response capabilities (\$15.6 million); FEMA, State and local public education and awareness programs (\$1.5 million); FEMA programmatic guidance documents to aid in the management of FEMA and State CSEPP technical operations and off-site planning activities (\$0.9 million); and FEMA, State, and local travel and transportation (\$1.7 million).

Non-Stockpile Chemical Materiel Product (NSCMP)--Program Management: The FY 2001 budget request of \$5.7 million consists of \$1.8 million to fund 19 workyears of labor, awards, overtime and summer hire program; \$0.4 million for travel and transportation; and \$3.5 million for contractual effort to include matrix support from SBCCOM (29 workyears), material and supplies and base operation support costs.

Non-Stockpile Chemical Materiel Product NSCMP--Mission: The FY 2001 budget request of \$41.8 million provides for: RRS training package with modifications (\$0.3 million); lay-away MMD-1 system at Deseret Chemical Depot (\$0.5 million); continue demolition efforts for former production facilities at Newport Chemical Depot (\$11.6 million); begin assessment of CW materiel at PBA (\$7.8 million); complete destruction operations for chemical agent identification sets at Johnston Island (\$3.2 million); continued support to the assessment of recovered chemical weapons including Mobile Munitions Assessment System

**BUDGET ACTIVITY 3: OPERATION AND MAINTENANCE**

**Department of the Army  
Justification of Funds Required**

operations (\$0.6 million), and Portable Isotopic Neutron Spectroscopy operations, Munitions Assessment Review Board meetings, U.S. Corps of Engineer and Technical Escort Unit support (\$1.7 million); system engineering and project management activities such as public outreach, program integration, and engineering support (\$12.4 million); overarching test concept plan updates (\$0.2 million); programmatic (non-system specific) training to support operations of treatment systems (\$1.1 million); environmental permitting activities to support site remediations (\$2.2 million); and programmatic support equipment such as munitions overpacks for recovered chemical munitions (\$0.2 million).



**MILITARY CONSTRUCTION, ARMY**

(In Thousands of Dollars)

<b>FY 2001 Estimate</b>	<b>\$175,400</b>
<b>FY 2000 Budget</b>	<b>\$173,025</b>
<b>FY 1999 Actual</b>	<b>\$74,800</b>

**Purpose and Scope**

The Military Construction, Army appropriation provides funding for design and construction of full-scale chemical disposal facilities and associated projects to upgrade installation support facilities and infrastructures required to support the Chemical Demilitarization Program. This document provides requirements for the construction of chemical disposal facilities budgeted in the Military Construction, Army appropriation in order to provide a clear, non-fragmented accounting of the requirements necessary to meet the congressional mandate.

**Justification of Funds Required**

The costs for facilities construction for each chemical disposal plant to be built are based on site-specific design criteria and depot infrastructure requirements. Included in these requirements are planning, acquisition, construction and other supporting activities in order to complete the Chemical Demilitarization Program as scheduled.

**MILITARY CONSTRUCTION, ARMY**

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

The FY 1999, 2000, and 2001 total resource levels required to fully support the following facilities and depot support are shown below.

<b><u>Location/Facilities</u></b>	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>
<b><u>Construction</u></b>	<b><u>Actuals</u></b>	<b><u>Budget</u></b>	<b><u>Estimate</u></b>
AL, Anniston Chemical Agent Disposal Facility	0	7,000	0
OR, Umatilla Chemical Agent Disposal Facility	23,950	24,825	9,400
AR, Pine Bluff Chemical Agent Disposal Facility	9,000	49,800	43,600
CO, Pueblo Chemical Agent Disposal Facility	0	0	10,700
KY, Blue Grass Chemical Agent Disposal Facility	0	0	0
MD, Aberdeen Chemical Agent Disposal Facility	26,500	53,500	45,700
IN, Newport Chemical Agent Disposal Facility	11,500	35,900	54,400
MD, Munitions Assessment & Processing System (NSCMP)	0	0	3,100
<b>Total Construction</b>	<b>70,950</b>	<b>171,025</b>	<b>166,900</b>
<b><u>Location/Support</u></b>			
<b><u>Depot Support</u></b>			
MD, Aberdeen Proving Ground	1,850	0	0
IN, Newport Chemical Depot	2,000	0	0
KY, Blue Grass Army Depot	0	2,000	8,500
<b>Total Depot Support</b>	<b>3,850</b>	<b>2,000</b>	<b>8,500</b>
<b><u>Planning and Design (Various Locations)</u></b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>74,800</b>	<b>173,025</b>	<b>175,400</b>

## **MILITARY CONSTRUCTION, ARMY**

### **NOTE:**

1. These military construction requirements are not a part of the Chemical Agent and Munitions Destruction, Army (CAMD,A) appropriation, but are essential to the Chemical Demilitarization Program. Without these resources, the program cannot be executed as shown in this document.

**Special Note Concerning Pueblo and Blue Grass:** A process technology selection for the chemical agent disposal facilities to be built at these sites has not been made. The Assembled Chemical Weapons Assessment (ACWA) Program is evaluating alternative technologies (technologies other than the baseline incineration-based technology). Final evaluations of the first series of ACWA alternative technologies was delivered to Congress October 1999. The FY 2001 request is adequate to support either ACWA or baseline requirements.