



# C M I A

## END OF OPERATIONS

MAY 17, 2012

"It's quite an achievement. I know from the Soldier who still has to wear a gas mask it's one less threat that we have to worry about. And I think on a global scale, there's global impact here."



**“Our achievement demonstrates that diverse people and organizations working together can successfully meet the toughest challenges.”**

## MESSAGE FROM THE ACTING DIRECTOR

The destruction of the last agent munitions in January 2012, made chemical weapons history. The U.S. Army Chemical Materials Agency (CMA) destroyed nearly 90 percent of the Nation’s chemical weapons stockpile and fulfilled our Chemical Weapons Convention Treaty requirements. We couldn’t have achieved this accomplishment without you—the men and women of CMA. You worked safely and diligently to make this happen. Congratulations!

Thank you for your personal sacrifices and your commitment to excellence. Even though we faced many challenges throughout the years, your dedication remained steadfast and led to this remarkable feat, the destruction of 27,474 U.S. tons of chemical agent and more than 2.3 million munitions.

Our achievement demonstrates that diverse people and organizations working together can successfully meet the toughest challenges. All of the sites and headquarters worked together by sharing lessons learned and reaching out to our stakeholders. We knew that our common goal—to destroy the stockpiles at Johnston Island, Maryland, Indiana, Alabama, Arkansas, Oregon and Utah—was challenging, but we forged ahead. Today we are justifiably proud—we made the world safer.

Safety was and will continue to be the cornerstone of CMA. I am proud to say that during destruction operations five sites—Alabama, Arkansas, Indiana, Oregon and Utah—earned the highest safety recognition issued by the U.S. Occupational Safety and Health Administration, the Voluntary Protection Program Star status. CMA’s recordable injury rate (RIR) has led the industry and often been on par with occupations such as insurance, finance and real estate. Our Pine Bluff team achieved a perfect RIR of zero in 2010, and the Tooele team recently reached 14 million hours worked without a lost-time accident. These are amazing achievements and well-deserved honors. Our safety record is a result of making safety our top priority; it is the result of each and every one of you making safety an integral part of every aspect of your life and work. Thank you.

But, we didn’t do it alone. We collaborated with other Army organizations, government agencies, state and federal regulators, contract partners, emergency responders and international treaty inspectors to complete our mission. Our success is a result of these relationships.

We are continuing with our remaining missions—safely storing stockpiles at Blue Grass Chemical Activity and Pueblo Chemical Depot and continuing our partnership with the Chemical Stockpile Emergency Preparedness Program to protect communities in those states, managing and closing the destruction facilities at Anniston, Pine Bluff, Deseret and Umatilla and assessing and destroying recovered chemical warfare materiel as it is discovered.

I thank each and every one of you who had a role in completing our destruction mission. I know you are proud, just like I am, to be an integral part of making chemical weapons history.

Congratulations on a job well done!

**DON E. BARCLAY**

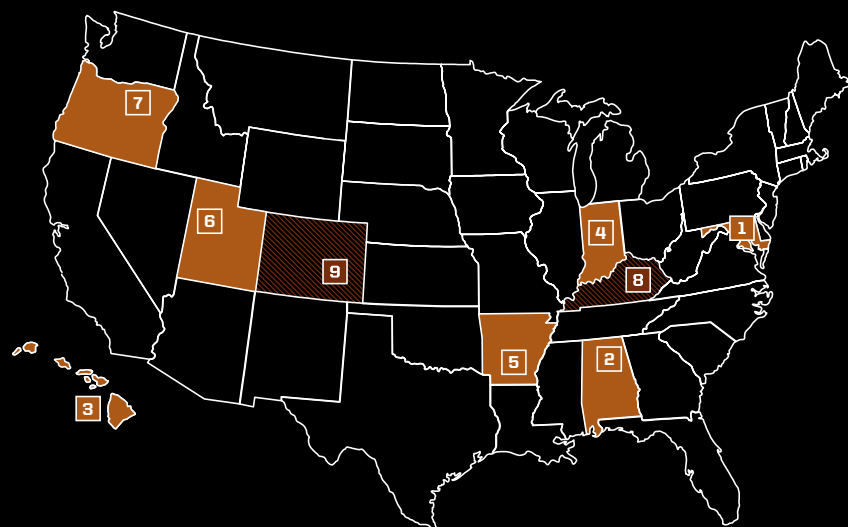
Acting Director, U.S. Army Chemical Materials Agency



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# CHEMICAL STOCKPILE DESTRUCTION SITES



\*CMA storage/Assembled Chemical Weapons Alternatives destruction sites

## COMMANDER

## SITE PROJECT MANAGER

|                           |   |                               |
|---------------------------|---|-------------------------------|
| <b>1   ABERDEEN</b>       | Col. Gerald Gladney, 2002–2005          | Joe Lovrich, 2002–2005        |
| Edgewood, Maryland        |   |                               |
| <b>2   ANNISTON</b>       | Lt. Col. Willie Flucker, 2010–Present   | Timothy Garrett, 2000–Present |
| Anniston, Alabama         |   |                               |
| <b>3   JOHNSTON ATOLL</b> | Col. Stephen Brooks, 2000–2001          | Gary McCloskey, 1990–2003     |
| Johnston Atoll            |   |                               |
| <b>4   NEWPORT</b>        | Lt. Col. William Hibner, 2008–2010      | Jeffrey Brubaker, 2003–2009   |
| Newport, Indiana          |   |                               |
| <b>5   PINE BLUFF</b>     | Lt. Col. Nathaniel Farmer, 2009–2011    | Mark Greer, 2007–Present      |
| Pine Bluff, Arkansas      |   |                               |
| <b>6   DESERET</b>        | Col. Mark Pomeroy, 2010–Present         | Thaddeus Ryba, 2004–Present   |
| Tooele, Utah              |   |                               |
| <b>7   UMATILLA</b>       | Lt. Col. Kris Perkins, 2009–Present     | Gary Anderson, 2010–Present   |
| Umatilla, Oregon          |   |                               |
| <b>8   BLUE GRASS*</b>    | Lt. Col. Steven Basso, 2010–Present     |                               |
| Blue Grass, Kentucky      |   |                               |
| <b>9   PUEBLO*</b>        | Lt. Col. Timothy Greenhaw, 2011–Present |                               |
| Pueblo, Colorado          |   |                               |

## CHEMICAL STOCKPILE ELIMINATION PROJECT

### ABERDEEN PROVING GROUND, MARYLAND

Since 1941, the Army safely stored approximately 5 percent of the Nation's original chemical agent in steel ton containers at the Edgewood Area of Aberdeen Proving Ground. The stockpile consisted of chemical blister agent (HD). Destruction operations were completed in February 2006, using neutralization.

### ANNISTON, ALABAMA

Since the early 1960s, the Army safely stored approximately 7 percent of the Nation's original chemical weapons stockpile at the Anniston Army Depot. The chemical weapons stored at the depot contained GB or VX nerve agents or blister agents (HD and HT). The site completed destruction of blister agent using incineration in September 2011, marking the complete destruction of the depot stockpile.

### JOHNSTON ATOLL

The Johnston Atoll Chemical Agent Disposal System served as the Army's first full-scale chemical weapons disposal facility, destroying more than 4 million pounds of nerve agents, GB and VX, as well as blister agent (HD), using high-temperature incineration technology. Chemical agents contained in 412,798 munitions, including projectiles, rockets, bombs, and ton containers, were eliminated in November 2000, reducing the overall U.S. original chemical weapons stockpile by 6 percent.

### NEWPORT, INDIANA

The Newport Chemical Depot opened in 1941. From 1961 to 1968 the site produced all the U.S. VX nerve agent. Only one chemical—nerve agent VX and approximately 4 percent of the Nation's original chemical agent—was ever stockpiled at the depot. Agent destruction operations were completed in August 2008, using neutralization.

### PINE BLUFF, ARKANSAS

The Army safely stored approximately 12 percent of the Nation's original chemical weapons stockpile at the Pine Bluff Arsenal. The arsenal's chemical weapons stockpile consisted of various munitions and ton containers, containing GB or VX nerve agents or blister agent (HD). Destruction operations were completed in November 2010, using high-temperature incineration technology.

### DESERET, UTAH

The Army safely stored approximately 43 percent of the Nation's original chemical weapons stockpile at the Deseret Chemical Depot since 1942. The weapons originally stored at the depot consisted of various munitions and ton containers, containing GB, GA and VX nerve agents or blister agents (H, HD, HT and Lewisite). The last chemical agent munitions at the depot were safely destroyed in January 2012, using high-temperature incineration technology.

### UMATILLA, OREGON

The Army safely stored approximately 12 percent of the Nation's original chemical weapons stockpile at the Umatilla Chemical Depot, starting in 1962. The chemical weapons stored at the depot consisted of various munitions and ton containers containing GB or VX nerve agents or blister agent (HD). Stockpile disposal operations were successfully concluded in October 2011, using high-temperature incineration technology.

## CMA STORAGE OPERATIONS

### BLUE GRASS, KENTUCKY

The Blue Grass Chemical Activity is responsible for the safe, secure storage of the chemical weapons stockpile stored at the Blue Grass Army Depot, which comprises 523 tons of nerve agents GB and VX, and blister agent (HD) in projectiles, warheads and rockets. The depot stores a stockpile of chemical weapons comprising approximately 2 percent of the Nation's original chemical weapons stockpile.\*

### PUEBLO, COLORADO

The Pueblo Chemical Depot stores approximately 9 percent of the Nation's original chemical weapons stockpile, which is approximately 2,611 tons of blister agents (HD and HT).\*

*\*The Program Executive Office-Assembled Chemical Weapons Alternatives is responsible for the safe destruction in Kentucky and Colorado.*

## HEADQUARTERS LEADERSHIP



**MR. CONRAD F. WHYNE\***

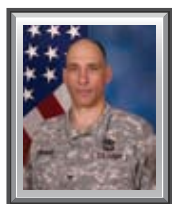
Program Executive Officer,  
Assembled Chemical Weapons Alternatives

Former Director,  
U.S. Army Chemical Materials Agency



**MR. DON E. BARCLAY**

Acting Director,  
U.S. Army Chemical Materials Agency



**COL. JOHN LEMONDES**

Project Manager Chemical Stockpile Elimination,  
U.S. Army Chemical Materials Agency



**COL. DARRYL BRIGGS**

Director of Stockpile Operations,  
U.S. Army Chemical Materials Agency



**MR. LAURENCE GOTTSCHALK**

Project Manager, Non-Stockpile  
Chemical Materiel Project,  
U.S. Army Chemical Materials Agency

\*Mr. Whyne was the CMA Director when the stockpile destruction mission was completed in January 2012.

The U.S. Army Chemical Materials Agency (CMA) headquarters (HQ) management team is located at the Edgewood Area of Aberdeen Proving Ground, Md. CMA's Director oversees the organization, with major areas of responsibility including: Transition Management, Risk Management, Non-Stockpile Chemical Materiel Project, Chemical Stockpile Elimination and the Director of Stockpile Operations. The Chief of Staff is responsible for the following teams: Resource Management, Human Resources, Public Affairs and Mission Support. The team supported the disposal of six chemical weapons stockpiles within the continental United States, as well as the stockpile at Johnston Island.

CMA has had many directors and program and project managers throughout the years, whose commitment to the Agency's mission to "enhance national security by storing and ultimately eliminating U.S. chemical warfare materiel (CWM), and supporting CWM responses" has been unwavering.

Now that the Agency's stockpile destruction mission is complete, CMA HQ will focus on its remaining missions, which include responding to recovered CWM; closing the four remaining destruction facilities at Anniston, Pine Bluff, Deseret and Umatilla; safely storing the remaining chemical weapons stockpiles in Kentucky and Colorado; supporting the communities surrounding the Kentucky and Colorado stockpiles with emergency management planning and working with the treaty mission as the Army's Executive Agent.

## PAST LEADERSHIP

**COL. SAMPSON H. BASS, JR.**

Program Manager for Demilitarization of Chemical Materiel, October 1972 – July 1975

**BRIG. GEN. SAMPSON H. BASS, JR.**

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration, July 1975 – June 1976

**COL. FRANK A. JONES, JR.**

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration, June 1976 – December 1978;

Project Manager for U.S. Army Toxic and Hazardous Materials Agency, December 1978 – September 1980

**COL. JOHN D. SPENCE**

Project Manager U.S. Army Toxic and Hazardous Materials Agency, September 1980 – June 1983

**COL. PETER D. HIDALGO**

Project Manager U.S. Army Toxic and Hazardous Materials Agency, June 1983 – February 1985

**COL. FERNAND A. THOMASSY**

Project Manager, U.S. Army Toxic and Hazardous Materials Agency, February 1985 – May 1986

**BRIG. GEN. DAVID A. NYDAM**

Program Manager for Chemical Munitions (Demilitarization and Binary), May 1986 – December 1988

**BRIG. GEN. WALTER L. BUSBEE**

Program Manager for Chemical Munitions (Demilitarization and Binary), January 1989 – March 1989;  
Program Executive Officer-Program Manager for Chemical Demilitarization, March 1989 – February 1990;  
Program Manager for Chemical Demilitarization, February 1990 – October 1992;  
Program Manager, U.S. Army Chemical Material Destruction Agency, October 1992 – September 1994

**COL. JAMES M. COVERSTONE**

Program Manager, U.S. Army Chemical Material Destruction Agency, September 1994 – December 1994;  
Program Manager, U.S. Army Chemical Demilitarization and Remediation Activity, December 1994 – May 1995

**MAJ. GEN. ROBERT D. ORTON**

Program Manager, U.S. Army Chemical Demilitarization and Remediation Activity, May 1995 – October 1995;  
Program Manager for Chemical Demilitarization, October 1995 – June 1997

**MR. JAMES L. BACON**

Program Manager for Chemical Demilitarization, July 1997 – April 2002

**MR. DELBERT F. BUNCH**

Deputy Program Manager for Chemical Demilitarization, June 2002 – February 2003

**MR. MICHAEL A. PARKER**

Acting Director, U.S. Army Chemical Materials Agency (Provisional), February 2003 – November 2003;  
Director U.S. Army Chemical Materials Agency, November 2003 – January 2007

**MR. DALE A. ORMOND**

Acting Director, U.S. Army Chemical Materials Agency, January 2007 – January 2008

**MR. CONRAD F. WHYNE**

Director, U.S. Army Chemical Materials Agency, January 2008 – February 2012



# CHEMICAL DEMILITARIZATION PROGRAM (CDP) TIMELINE



**1960s AND BEFORE** | Chemical agents were developed in the United States at various sites as a response to WWI and WWII.



**1979** | Aerial view of the CAMDS in Utah, shortly after starting its research and development mission.



**1987** | JACADS during systemization, or testing, of the plant equipment and processes.

## 1960s AND BEFORE

Edgewood Arsenal, Md., produces mustard and phosgene—new installations constructed in Huntsville, Ala., Denver, Colo., Pine Bluff, Ark., and Tooele, Utah, to store the agents.

After World War II, United States produces nerve agent GB at Rocky Mountain Arsenal near Denver, Colo., and VX at Newport, Ind.

## 1971

United States transfers chemical munitions from Okinawa, Japan, to Johnston Island—located about 800 miles from Hawaii.

## 1972

U.S. Army Materiel Command Program Manager for Demilitarization of Chemical Materiel formed at Picatinny Arsenal, near Dover, N.J.

## 1973

Program Manager for Demilitarization of Chemical Materiel is relocated to Edgewood Arsenal, Md.

## 1975

Program Manager for Demilitarization of Chemical Materiel changed to Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration.

## 1978

Department of the Army Project Manager for Chemical Demilitarization and Installation Restoration changed to U.S. Army Toxic and Hazardous Materials Agency (USATHAMA).

## 1979

Army constructs and begins operating Chemical Agent Munitions Disposal System (CAMDS)—a pilot incineration facility located at what is now Deseret Chemical Depot (DCD), Utah.

## 1985

Construction of full-scale prototype demilitarization facility begins on Johnston Island in the Pacific Ocean. Facility will be named Johnston Atoll Chemical Agent Disposal System (JACADS).

## 1986

Public Law 99-145 requires safe destruction of the U.S. unitary chemical weapons stockpile. Stockpiles are stored at Aberdeen, Md., Pine Bluff, Ark., Deseret, Utah, Umatilla, Ore., Newport, Ind., Anniston, Ala., Blue Grass, Ky., Pueblo, Colo., and on Johnston Island in the Pacific Ocean.

Program Manager for Chemical Munitions (Demilitarization and Binary) formed from part of USATHAMA.

## 1987

JACADS construction complete.

## 1988

Chemical Stockpile Emergency Preparedness Program (CSEPP) established in response to Public Law 99-145.

## 1988-1990

Army destroys BZ agent at Pine Bluff Arsenal (PBA), Ark.



**1989** | Chemical demilitarization program leaders and VIPs break ground for the TOCDF in Utah.



**1996** | A mule deer, one of many varieties of wildlife in the area, standing in front of the operating TOCDF.



**1999** | Construction activities at the ABCDF.

## 1989

Program Manager for Chemical Munitions (Demilitarization and Binary) is changed to Program Executive Officer-Program Manager for Chemical Demilitarization.

Construction begins on Tooele Chemical Agent Disposal Facility (TOCDF) at DCD, Utah.

## 1990

JACADS begins destruction of the Johnston Island stockpile, 6 percent of Nation's original stockpile.

Program Executive Office-Program Manager for Chemical Demilitarization is changed to Program Manager for Chemical Demilitarization (PMCD).

## 1992

U.S. Army Chemical Materiel Destruction Agency established, consolidating responsibility for the destruction of chemical materials into one office.

Complying with Public Law 102-484, the Non-Stockpile Chemical Materiel Project (NSCMP) is created to develop systems to safely assess, treat and destroy five categories of chemical warfare materiel not part of declared stockpile.

## 1994

U.S. Army Chemical Materiel Destruction Agency is changed to U.S. Army Chemical Demilitarization and Remediation Activity (CDRA); placed under U.S. Army Chemical and Biological Defense Command (CBDCOM).

Army establishes Alternative Technologies and Approaches Project to investigate alternatives to incineration technology at two bulk agent sites, Aberdeen Proving Ground (APG) and Newport Chemical Depot (NECD).

## 1995

CDRA separated from CBDCOM—renamed PMCD.

## 1996

TOCDF, with about 44 percent of Nation's original stockpile of nerve and blister agents, begins destroying chemical weapons.

## 1997

United States ratifies Chemical Weapons Convention (CWC), agreeing to dispose of its unitary chemical weapons stockpile, binary chemical weapons, recovered chemical weapons and former chemical weapons production facilities.

Construction begins on Anniston Chemical Agent Disposal Facility (ANCDF) at Anniston Army Depot (ANAD), Ala., and Umatilla Chemical Agent Disposal Facility (UMCDF) at Umatilla Chemical Depot (UMCD), Ore.

PMCD meets CWC treaty requirement, destroying 1 percent of U.S. chemical weapons stockpile.

NSCMP fields the first Mobile Munitions Assessment System.

## 1999

Construction begins on Aberdeen Chemical Agent Disposal Facility (ABCDF) at APG, Md.

NSCMP meets CWC requirement by destroying "excess other" and "parity other" binary weapons components.

Construction begins at Pine Bluff Chemical Agent Disposal Facility (PBCDF) at PBA, Ark.

## 2000

JACADS completes destruction of its chemical weapons stockpile.

Construction begins on the Newport Chemical Agent Disposal Facility (NECDF) at NECD, Ind.



**2003** | Workers load nerve agent GB-filled M55 rockets into the destruction process line as ANCDF starts disposal operations.



**2005** | ABCDF workers send the last emptied mustard ton container into the Ton Container Cleanout Facility for complete cleaning and decontamination.



**2006** | Former Newport VX Production Facility, Newport Chemical Depot, Ind.

## 2001

NSCMP Rapid Response System (RRS) treats more than 700 Chemical Agent Identification Set (CAIS) items at DCD.

Responding to attacks on Sept. 11, 2001, the Army studies accelerating destruction operations.

CWC treaty requirement is met with destruction of 20 percent of U.S. chemical weapons stockpile.

NSCMP treats 10 recovered sarin-filled bomblets at Rocky Mountain Arsenal, Colo., using the Explosive Destruction System (EDS) for the first time.

## 2002

Army announces plans to accelerate destruction of the chemical agent stockpiles at Aberdeen and Newport.

CWC treaty requirement is met with destruction of 100 percent of the original inventory of Category 3 munitions.

## 2003

PMCD merges with the stockpile storage mission within the U.S. Army Soldier and Biological Chemical Command to form the U.S. Army Chemical Materials Agency (CMA).

ANCDF begins disposing of chemical weapons stored at ANAD — approximately 7 percent of original U.S. stockpile.

ABCDF begins disposing of mustard agent stored in large steel bulk containers at APG — approximately 5 percent of original U.S. stockpile.

NSCMP begins cleaning obsolete large steel bulk containers at the Pine Bluff Ton Container Decontamination Facility at PBA, Ark.

The United States meets CWC treaty requirement by destroying 80 percent of former chemical weapons production facilities.

NSCMP's Single CAIS Access and Neutralization System (SCANS) treats first CAIS item at Fort McClellan, Ala.

## 2004

UMCDF begins disposing of chemical weapons stored at UMCD — approximately 12 percent of original U.S. stockpile.

NSCMP begins testing Munitions Assessment and Processing System at Aberdeen.

## 2005

ABCDF destroys all drained mustard agent from the APG stockpile.

TOCDF destroys its millionth chemical agent munition at DCD.

NECDF begins disposal operations of nerve agent VX stored in large steel bulk containers — approximately 4 percent of original U.S. stockpile.

PBCDF begins disposal operations of the PBA chemical munitions and bulk containers — approximately 12 percent of original U.S. stockpile.

## 2006

Treaty inspectors with the Organisation for the Prohibition of Chemical Weapons verify complete destruction of ABCDF's hydrolysate at DuPont, marking the official 100 percent destruction of the APG stockpile.

Treaty inspectors verify destruction of the former chemical warfare production facility at NECD.

NSCMP finishes chemically neutralizing U.S. supply of precursor chemical agents DF and QL.

United States meets the CWC treaty requirement by destroying 100 percent of former chemical weapons production facilities.

NSCMP Pine Bluff Explosive Destruction System (PBEDS) begins treating more than 1,200 munitions at PBA.





**2008 |** Operators show the last VX nerve agent-filled land mine from the ANCA stockpile as it is loaded into the destruction process at the ANCDF.



**2010 |** NSCMP's EDS is used at PBA, Ark., to destroy the largest cache of non-stockpile munitions in the United States.



**2012 |** Toxic material handlers load the last mustard agent-filled ton container into an on-site container for safe transport from DCD Area 10 to the TOCDF for disposal.

## 2007

Army meets CWC milestone — destroying 45 percent of U.S. chemical agent stockpile since Entry-into-Force.

Last VX nerve agent-filled spray tank in U.S. chemical weapons stockpile destroyed.

NSCMP meets CWC 100 percent destruction of all binary chemical warfare materiel deadline.

## 2008

Last M55 rocket in CMA disposal mission destroyed; cumulative storage risk to public reduced by 94 percent.

NECDF completes bulk nerve agent VX disposal mission.

CMA destroys all VX in disposal mission inventory when ANCDF destroys final VX-filled land mine.

## 2009

CMA reaches 60 percent destruction — more than 1.9 million — of munitions in original U.S. chemical weapons stockpile.

CAMDS at DCD, celebrates 30 years as the primary research, test and development facility for the U.S. chemical weapons disposal program.

CMA celebrates the safe destruction of the two millionth munition since CWC Entry-into-Force.

## 2010

NSCMP completes PBEDS mission, destroying more than 1,200 munitions cached at PBA.

CMA reaches 75 percent destruction of U.S. chemical weapons stockpile since CWC Entry-into-Force.

PBCDF safely completes chemical weapons destruction operations at PBA.

NSCMP completes three successful assessment and destruction missions at Redstone Arsenal, Ala., Camp Sibert, Ala., and Spring Valley, Washington, D.C., using the transportable EDS.

## 2011

CMA achieves destruction of 85 percent of the U.S. chemical agent stockpile since Entry-into-Force.

Pine Bluff Ton Container Decontamination Facility, operated by NSCMP, completes decontaminating 4,307 ton containers, recycling 6.5 million pounds of steel.

ANCDF completes destruction of the chemical weapons stockpile at ANAD, Ala.

UMCDF completes destruction of the chemical weapons stockpile at UMCD, Ore.

## 2012

TOCDF completes destruction of the chemical weapons stockpile at DCD.

CMA completes Chemical Stockpile Elimination mission destroying 89.75 percent (27,474 U.S. tons) of the Nation's chemical weapons stockpile stored at seven sites.

## NON-STOCKPILE CHEMICAL MATERIEL PROJECT

As one of the U.S. Army Chemical Materials Agency's (CMA) missions, the Non-Stockpile Chemical Materiel Project (NSCMP) is responsible for managing the assessment and disposal of recovered chemical warfare materiel (RCWM) in a safe, environmentally-sound and cost-effective manner in compliance with the Chemical Weapons Convention (CWC). The NSCMP team, comprised of engineers, project managers, chemists and subject-matter experts, leads the Nation in the development and use of advanced technology to treat RCWM.

The NSCMP team will continue to support CMA and the Army in responding to recovered chemical warfare materiel.

### Key NSCMP milestones include:



#### 2002

Destroyed all miscellaneous chemical warfare materiel treaty items, including both treaty and non-treaty items, such as unfilled munitions, support equipment and devices designed for use with chemical weapons.



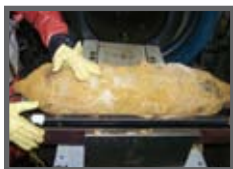
#### 2006

Destroyed former chemical warfare production facilities located at Rocky Mountain Arsenal, Colo.; Muscle Shoals, Ala.; Newport Chemical Depot, Ind.; Aberdeen Proving Ground, Md.; and Pine Bluff Arsenal (PBA), Ark.



#### 2007

Safely completed destruction of the binary chemical weapons inventory.



#### 2010

Operators at the Pine Bluff Explosive Destruction System, located at PBA, Ark., destroyed the last munition in its inventory, marking the destruction of all recovered non-stockpile materiel declared by the United States at Entry-into-Force of the CWC.



#### 2011

Recycled more than 6.5 million pounds of steel through the safe decontamination of 4,307 ton containers that once held hazardous materials at the Pine Bluff Ton Container Decontamination Facility located at PBA, Ark.

## CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM



### Accident scenario during a CSEPP exercise at PBA, Ark.

When Congress mandated destruction of the chemical weapons stockpiles, it was important to protect our workforce, our communities and our environment. CMA conducted studies to help determine the need for local communities to improve existing emergency plans, training, equipment and facilities. This led to the creation of the Chemical Stockpile Emergency Preparedness Program (CSEPP) in 1988. CSEPP's purpose was to improve the emergency response capabilities in communities that surrounded the chemical stockpiles.

CSEPP teamed with the Army and the Federal Emergency Management Agency, also known as FEMA, as well as other federal, state and local agencies in the states where stockpiles were located to prepare communities for a variety of emergencies, including a chemical accident or incident. As a result, these communities now have:

- Upgraded Emergency Operations Centers for response to any emergency;
- Well-trained emergency responders, including police officers, firefighters and emergency medical teams; and
- Thoroughly tested emergency plans, procedures and equipment as a result of annual CSEPP exercises.

The safe destruction of the Nation's chemical weapons stockpiles has resulted in some of the best-prepared communities in the Nation. CSEPP's mission continues as it supports communities surrounding the stockpiles in Kentucky and Colorado.

## STORAGE



Mustard agent-filled projectiles in a storage igloo or bunker at the Pueblo Chemical Depot, Colo.

**Safety is the cornerstone of all CMA missions—safety of our workforce, our communities and our environment. Thorough job training and certification in the Army's Personnel Reliability Program is designed to ensure safety is maintained at all times.**

While the Program Executive Office - Assembled Chemical Weapons Alternatives (ACWA) is responsible for the destruction of the chemical weapons in Kentucky and Colorado, the U.S. Army Chemical Materials Agency (CMA) retains the mission for safe and secure storage of those stockpiles. Kentucky's chemical weapons stockpile is comprised of 523 tons of nerve agents GB and VX and blister agent (HD); Colorado's stockpile contains approximately 2,611 tons of blister agents (HD and HT).

The chemical agents and munitions at both sites are housed in designated storage areas and specially designed earth-covered magazines, commonly referred to as storage igloos or bunkers, located at Blue Grass Army Depot, Ky., and at

Pueblo Chemical Depot, Colo. CMA maintains a National Inventory Control Point and National Maintenance Point to ensure the stockpile is maintained safely during its entire storage life.

Safety is the cornerstone of all CMA missions—safety of our workforce, our communities and our environment. Thorough job training and certification in the Army's Personnel Reliability Program is designed to ensure safety is maintained at all times. CMA will continue its emphasis on safety to ensure that our workforce, our communities, our environment and the chemical weapons stockpiles in Kentucky and Colorado remain safe until they are destroyed.

## TREATY



OPCW headquarters in The Hague, Netherlands.

When the United States, along with 86 other nations, originally signed and ratified the Chemical Weapons Convention (CWC) treaty in 1997, the agreement included the following:

- Prohibited the development, production, stockpile and use of chemical weapons;
- Required each signatory nation possessing chemical weapons to destroy them in an environmentally safe manner; and
- Forbade the disposal of chemical weapons by open-pit burning, land burial or dumping in any body of water.

Currently, 188 member states have ratified the CWC. The Organisation for the Prohibition of Chemical Weapons (OPCW), an international organization in The Hague, Netherlands, oversees CWC implementation.

In order to verify U.S. compliance with the treaty, inspection teams from the OPCW were housed near and had offices at each disposal site. CMA maintained transparency with OPCW inspectors, ensuring that the chemical munitions were stored and destroyed in accordance with all treaty requirements.

CMA will continue working with its international stakeholders at its storage missions in Kentucky and Colorado until those chemical weapons stockpiles are destroyed.



**“Teamwork is the ability to work together toward a common vision. The ability to direct individual accomplishments toward organizational objectives. It is the fuel that allows common people to attain uncommon results.” – ANDREW CARNEGIE**

CMA’s workforce attained uncommon results. The agency bore the weighty responsibility of destroying one of the Nation’s deadliest types of weapons—chemical agents—and the workforce dedicated their professional careers to the safety of their families, communities and country. CMA worked hard, CMA worked smart, but most importantly, CMA worked together safely.

## Teamwork is the reason CMA made chemical weapons history.

Many thanks to state regulators, local and national elected officials, community groups and other partners who shared CMA’s vision and determination to safely destroy the Nation’s chemical weapons stockpile. Community support around the country was an integral part of the program’s success at the sites and as a program:

### PARTNERS

20th Support Command  
22nd Chemical Battalion  
Alabama Department of Environmental Management  
Argonne National Laboratory  
Arkansas Department of Environmental Quality  
Assembled Chemical Weapons Alternatives  
Chemical Weapons Convention  
Colorado Department of Public Health & Environment  
Confederated Tribes of the Umatilla Indian Reservation  
Defense Information Systems Agency  
Defense Threat Reduction Agency  
Department of Defense Explosives Safety Board  
Department of Energy  
Edgewood Chemical Biological Center  
EPA Region 9 (Pacific Southwest)  
Federal Emergency Management Agency  
Idaho National Laboratory  
Indiana Department of Environmental Management  
Kentucky Department for Environmental Protection  
Maryland Department of Environment  
National Academy of Sciences  
National Research Council  
Occupational Safety and Health Administration  
Oregon Environmental Quality Commission  
Organisation for the Prohibition of Chemical Weapons  
U.S. Air Force  
U.S. Army Center for Health Promotion and Preventive Medicine  
U.S. Army Contracting Command  
U.S. Army Corps of Engineers  
U.S. Army Materiel Systems Analysis Activity

U.S. Army Public Health Command  
U.S. Army Research, Development and Engineering Command  
U.S. Centers for Disease Control and Prevention  
U.S. Environmental Protection Agency  
U.S. Fish & Wildlife Service  
Sandia National Laboratory  
Utah Department of Environmental Quality

### SYSTEM CONTRACTORS

Bechtel  
EG&G Defense Materials Inc.  
Parsons Infrastructure & Technology  
Raytheon Corporation  
URS Corporation  
Washington Defense Group  
Washington Demilitarization Company  
Westinghouse Anniston

### SUPPORT CONTRACTORS

A.D. Little  
Alion Science and Technology Corporation  
Artech, Inc.  
BAI Inc  
Battelle Memorial Institute  
Booz Allen Hamilton  
CH2M Hill  
Cooper Zietz Engineers, Inc.  
CRGT  
DuPont  
EA Engineering  
Earth Tech Inc.

General Physics  
Hendrix Enterprises  
Innovative Emergency Management  
Mason and Hanger  
Mitretek/Noblis  
Northrop Grumman Information Systems  
Oak Ridge National Labs  
Oasis in the Workplace  
Pueblo Diversified Industries, Inc.  
RCMI  
Science Applications International Corporation  
Shaw Environmental  
STEM International  
Teledyne Brown Engineering  
Tennessee Valley Authority  
URS Coleman  
UXB International  
V.G. Associates  
Veolia Environmental Services  
Vista Engineering Technologies

### SUB-CONTRACTORS

A. Bright Idea  
Alpha Management Solutions  
Altus Engineering  
Horne International  
JACOBS Engineering  
MRI Global  
Science and Technology Corporation  
Southwest Research Institute  
Tetra Tech