OUR MISSION

THE SAFE ELIMINATION OF CHEMICAL WEAPONS
AT PUEBLO AND BLUE GRASS BY DECEMBER 31, 2023

OUR VALUES

SAFETY

IN VolvEMENT

TRANSPARENCY

COST EFFECTIVENESS &

PRUDENT STEWARDSHIP

EMPOWERMENT

OVERCOMING CHALLENGES

DIVERSITY

The Program Executive Office, Assembled Chemical Weapons Alternatives, or PEO ACWA, is the government organization in the United States safely destroying the remaining U.S. chemical weapons stockpile stored at the U.S. Army Pueblo Chemical Depot in Pueblo, Colorado, and Blue Grass Army Depot, near Richmond, Kentucky. Our values represent the promise made by the program to the citizens who live and work near these U.S. Army installations and to the global community. This promise is lived each day by the many dedicated Americans who are partners in the PEO ACWA mission, the safe elimination of chemical weapons at Pueblo and Blue Grass by December 31, 2023.
WHAT ARE ASSEMBLED CHEMICAL WEAPONS?

Assembled chemical weapons are configured with fuzes, explosives, propellants, chemical agents, shipping and firing tubes and packaging materials. Examples include rockets and projectiles.

THE U.S. STOCKPILE IN COLORADO

The stockpile at the U.S. Army Pueblo Chemical Depot contains the mustard (or blister) agents HD and HT in mortar rounds and artillery projectiles. These agents are colorless liquid compounds in their pure state. They can cause severe burns and damage to the skin, eyes and lungs.

THE U.S. STOCKPILE IN KENTUCKY

The stockpile at the Blue Grass Army Depot contains mustard (or blister) and nerve agents. Mustard (H) agent is contained in projectiles. The nerve agents VX and Sarin (GB) are contained in projectiles and rockets. Nerve agents are clear and colorless liquids, named for their lethal effects on the nervous system.

SAFE CHEMICAL WEAPONS DESTRUCTION

The destruction of the remaining U.S. chemical weapons stockpile is the responsibility of the Department of Defense, or DOD, as mandated by Public Law 99-145. PEO ACWA, headquartered at Aberdeen Proving Ground, Maryland, reports directly to the Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense Programs, which is a key element of the Office of the Under Secretary of Defense for Acquisition and Sustainment. Administratively, the program is aligned under the Assistant Secretary of the Army (Acquisition, Logistics and Technology).

Since the inception of PEO ACWA, people have been its driving force, embodying its values and the program motto, “A Partnership for Safe Chemical Weapons Destruction.” From technical oversight organizations and lawmakers to local community members and the workforce, a diverse group of people devote their time and effort toward destroying the nation’s remaining chemical weapons stockpile.

In the 1980s, with the rise of international dialogue concerning the effects of chemical warfare, Congress directed the Army to destroy all U.S. chemical weapons. This was reinforced by a Presidential directive, and the U.S. ratification in 1997 of the Chemical Weapons Convention. The treaty, signed by 193 nations, compels members to destroy their chemical weapons stockpiles and is enforced by the Organisation for the Prohibition of Chemical Weapons.

To comply with the Chemical Weapons Convention, the U.S. must destroy all chemical weapons it owns or possesses, to include destroying those that may have been abandoned in other countries and destroying facilities used to produce and eliminate chemical weapons.

Leaders of the U.S. chemical weapons destruction program have long-standing involvement and relationships with their counterparts around the world with similar missions. They share lessons learned with the international community to support the safe destruction of chemical weapons worldwide, while making the national mission and the cultivation of its stakeholder partnerships a top priority.
The Pueblo Chemical Agent-Destruction Pilot Plant, or PCAPP, is destroying the chemical weapons stockpile at the U.S. Army Pueblo Chemical Depot, in southeastern Colorado. The depot, which began storing chemical weapons in the early 1950s, originally stored 2,613 U.S. tons of weaponized mustard agent. In 2002, Bechtel Pueblo was chosen as the systems contractor to design, construct, systemize, test, operate and close PCAPP. The Bechtel Pueblo Team is comprised of prime contractor, Bechtel National Inc. and major teaming subcontractors Amentum, Battelle and GP Strategies.

The Static Detonation Chamber, or SDC, was selected to augment the pilot plant and destroy problematic munitions and munitions that have previously leaked. The munitions deteriorated physical condition does not easily allow for automated processing through the main plant.

The SDC uses thermal destruction technology to process the weapons. Chemical munitions are placed in a feed box, conveyed to the top of the SDC vessel and fed into the electrically heated detonation chamber. The high heat (approximately 1,100 degrees Fahrenheit) detonates the munition, and the chemical agents and energetics are destroyed by thermal decomposition. Gases generated as a result of the process are treated by an off-gas treatment system that includes a thermal oxidizer, scrubbers and a carbon filtered system. All waste streams generated are screened and remaining scrap metal is decontaminated to be recycled.

The first mustard agent-filled munitions were processed through the PCAPP’s main plant on Sept. 7, 2016, and operations are underway.

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STATIC DETONATION CHAMBER TECHNOLOGY AT BGCAPP

An X-ray assessment of the Blue Grass mustard stockpile confirmed the solidification of agent in a number of projectiles, rendering them unsuitable for automated processing in the main plant. As a result, Static Detonation Chamber, or SDC, technology was selected to destroy all of the mustard projectiles, as well as two 3-gallon Department of Transportation bottles containing mustard agent. The SDC was also selected to process drained rocket warheads and overpacked rockets from the nerve agent stockpile to augment main plant destruction in Kentucky.

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The first mustard agent-filled munitions were processed through the BGCAPP SDC on June 7, 2019, and operations are currently underway.

CHEMICAL WEAPONS STOCKPILE DESTRUCTION IN KENTUCKY

The Blue Grass Chemical Agent-Destruction Pilot Plant, or BGCAPP, is destroying the chemical weapons stockpile at the Blue Grass Army Depot near Richmond, Kentucky. The depot, which began storing chemical weapons in the 1940s, originally had 525 U.S. tons of nerve agents sarin (GB) and VX, and blister agent mustard in its stockpile. In 2003, Bechtel Parsons Blue Grass was chosen to design, construct, systemize, operate and close BGCAPP. Bechtel Parsons Blue Grass is a joint venture of Bechtel National Inc. and Parsons Government Services Inc. Their teaming partners include Amentum, Battelle and GP Strategies.

Neutralization followed by supercritical water oxidation was selected to destroy the nerve agent stockpile at the Blue Grass Army Depot. Extensively trained, knowledgeable, skilled workers and state-of-the-art robotic systems ensure the safe destruction of the stockpile.

Operations at BGCAPP’s main plant began on Jan. 17, 2020 with the destruction of 8-inch projectiles containing nerve agent.

Neutralization followed by supercritical water oxidation was selected to destroy the nerve agent stockpile at the Blue Grass Army Depot. Extensively trained, knowledgeable, skilled workers and state-of-the-art robotic systems ensure the safe destruction of the stockpile.

The neutralization process involves disassembling the munitions to separate the chemical agent from explosive components. The agent is destroyed by mixing it with hot water and caustic, resulting in a product known as hydrolysate. The supercritical water oxidation process then subjects the hydrolysate to very high temperatures and pressures, breaking it down into carbon dioxide, water and salts.

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A PARTNERSHIP THAT INVOLVES COMMUNITIES

Since the mid-twentieth century, the communities near the U.S. Army Pueblo Chemical Depot, Colorado, and Blue Grass Army Depot, Kentucky, have safeguarded portions of the nation’s chemical weapons stockpile. This responsibility evolved from the national decision made following the introduction of chemical warfare in World War I to create a chemical weapons stockpile as a deterrent to the use of such weapons against the United States. With the rise in international concern regarding the effects of chemical warfare, Congress directed the Army to destroy the stockpile. The communities near the Pueblo plant and Blue Grass plant continue to support the mission of the safe and environmentally sound destruction of the remaining U.S. chemical weapons stockpile.

INVOLVING THE LOCAL COMMUNITIES

In 1997, ACWA initiated a national public involvement process, known as the ACWA Dialogue, to work with communities and subject matter experts to identify and test potential destruction technologies for each stockpile as alternatives to incineration. Since that time, this fully participative process has served as the standard for ACWA’s ongoing outreach and public involvement initiatives.

The Pueblo and Richmond communities are each home to a public outreach office specifically established to support the program’s commitment to transparency. The offices act as information hubs that proactively provide the public with the latest news and information about ACWA’s chemical weapons destruction program.

Local leaders and community members actively participate in Chemical Demilitarization Citizens' Advisory Commissions, known as CACs, which serve as forums for exchanging information about chemical weapons destruction between the community and the government. The CACs afford opportunities for the public to become involved in their local demilitarization project and represent community and state interests to the Army and the Department of Defense.

CITIZENS’ ADVISORY COMMISSIONS

In accordance with Public Law 102-484, the mission of the CACs is to “provide a mechanism for the thorough and objective exchange of information among the citizens of Colorado and Kentucky, the Army and other organizations involved in the chemical weapons demilitarization program.” The governor of each state appoints nine members to the CAC, including seven private citizens who represent the local community and two representatives of state agencies that work closely with the chemical weapons destruction program. The CAC conducts public meetings to facilitate consistent public participation in the chemical weapons destruction program. Although the commission receives limited federal funding from the Department of Defense, it operates independent of federal government influence.

For more information on the CACs, meeting times or contact information, visit www.peoacwa.army.mil.
Stockpile Destroyed

Destruction Operations Underway

Stockpile Destruction Led by CMA

Stockpile Destruction Led by PEO ACWA

The U.S. Army Chemical Materials Activity, or CMA, developed and used technologies to safely store and eliminate chemical weapons at seven stockpile sites, resulting in destruction of nearly 90% of the original U.S. chemical weapons stockpile. Destruction of the remaining 10% is the responsibility of the ACWA program. The activity retains the mission for safe and secure storage of the remaining U.S. chemical weapons stockpile at the Blue Grass Army Depot, Kentucky, and U.S. Army Pueblo Chemical Depot, Colorado. PEO ACWA and CMA share the goal of destroying the nation’s chemical weapons, which provides many opportunities to jointly strengthen national chemical demilitarization efforts.

The Anniston team brings technical expertise and experience to the program after having destroyed chemical weapons at the former Anniston Chemical Agent Disposal Facility. In addition, Anniston operates a Static Detonation Chamber, or SDC, which augments the PCAPP facility in Colorado by destroying non-agent contaminated explosive components from the stockpile in Pueblo. The Anniston SDC also served as a training site for personnel that operate the Blue Grass SDC in Kentucky and the Pueblo SDC in Colorado.

The Anniston Field Office, is an element of PEO ACWA, located at the Anniston Army Depot, Alabama. Its mission is to support the destruction of the remaining U.S. chemical weapons stockpile located in Pueblo, Colorado and near Richmond, Kentucky.

WHAT IS THE ANNISTON FIELD OFFICE?

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