

CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM





## WHAT IS CSEPP?



The Chemical Stockpile Emergency Preparedness
Program (CSEPP) works closely with the communities
around the Nation's two remaining chemical weapons
storage and disposal sites in Kentucky and Colorado,
with the mission to "enhance existing local, installation,
tribal, state and federal capabilities to protect the
health and safety of the public, work force and
environment from the effects of a chemical accident
or incident involving the U.S. Army chemical stockpile"
(CSEPP Strategic Plan, July 2019).

A whole community partnership created in 1988, CSEPP unites the U.S. Army, Federal Emergency Management Agency (FEMA), other Federal departments and agencies, two States, local governments, volunteer organizations, the private sector and the public under a single goal – enhancing emergency preparedness. This partnership has improved the ability to protect the public by upgrading emergency plans and providing chemical accident response equipment and warning systems.

Aside from chemical stockpile response, communities may face emergencies related to weather, earthquakes, floods, fires, hazardous material spills or releases, and transportation and industrial accidents. The capabilities augmented by CSEPP enable communities to better respond to all hazards.

### SAFER BECAUSE OF CSEPP









The Department of Defense is destroying chemical weapons at Pueblo Chemical Depot (PCD), Colorado, which stores blister agent, and Blue Grass Army Depot (BGAD), Kentucky, where the Blue Grass Chemical Activity (BGCA) stores both blister and nerve agents. When Congress mandated destruction of the chemical stockpiles, it ordered "maximum protection" for the public until the stockpiles are eliminated. Early studies of the communities near the stockpiles showed the need to improve emergency plans, training, equipment and facilities.

CSEPP was created in 1988 to enhance emergency response capabilities in communities that surrounded the eight chemical stockpiles in existence at the time in the continental United States. CSEPP recognized that each community had its own needs for emergency preparedness. Since then, state and local emergency management officials have teamed with the Army and FEMA to protect the public from the unlikely event of a stockpile agent accident. Six of the eight sites in the U.S. have completed destruction of the stockpiles, followed by closeout of CSEPP operations.

The stockpiles In Colorado and Kentucky are safely stored by the U.S. Army Chemical Materials Activity (CMA), which supports preparedness for depot employees. The Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) has the mission to destroy the stockpiles.

CSEPP is committed to maintaining its preparedness mission until the entire chemical stockpile is destroyed and the risk to communities from the storage and disposal of chemical agents is eliminated.

**ENHANCING EMERGENCY** 

**PREPAREDNESS** 

At the two remaining sites, emergency management officials and responders prepare for all kinds of natural and manmade emergencies through careful planning, training and exercises. This legacy and the safe removal of the stockpiles are the greatest benefits the Army and FEMA provide to CSEPP communities, past and present.

CSEPP officials work together to prepare the whole community. Planners ensure that the community is prepared for all hazards. Training sponsored by CSEPP gives responders skills and knowledge they can use every day. Local emergency operations centers have been upgraded, while specialized equipment provided to each community by CSEPP supports safe, fast and efficient response.

Full-scale emergency preparedness exercises are held each year, with the local jurisdictions joining the State, Army and FEMA to practice keeping the public safe in the unlikely event of a chemical stockpile incident or accident. These exercises give emergency management officials and responders a valuable opportunity to test plans, procedures, skills and equipment in a realistic and challenging environment.

SAFE TODAY, SAFER TOMORROW

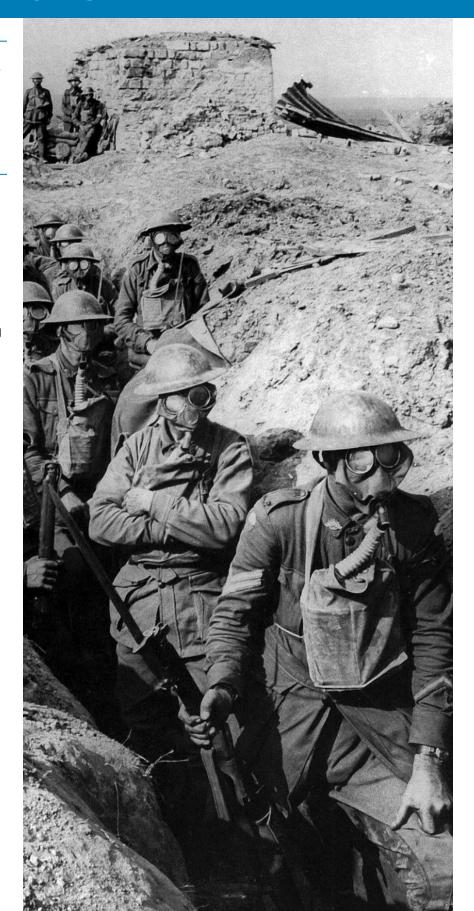
# A BRIEF HISTORY OF CHEMICAL WEAPONS

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Chemical weapons have been in existence since the Stone Age, when hunters used poison-tipped arrows. Following modern advances in chemistry, World War I began amid continuing debate about the morality of chemical warfare. Despite international efforts to prevent the use of toxic chemicals, World War I saw the first large-scale use of chemical weapons, leading to development of chemical weapons and chemical defensive equipment in the United States and in other countries around the world.

Between World War I and World War II, debate about chemical warfare intensified in the United States and in international forums. The Geneva Protocol, signed in 1925, prohibited the "use in war of asphyxiating, poisonous or other gases, and of bacteriological methods of warfare," but it did not address production, storage and transfer of chemical weapons.

After widespread international condemnation of chemical warfare, the United States signed the multilateral Chemical Weapons Convention (CWC) in 1993 and it went into effect in 1997. The CWC prohibits developing, producing, stockpiling or using chemical weapons. Under terms of the CWC, all former production facilities, chemical weapons and chemical agents must be destroyed.



### **CHEMICAL AGENTS**

The United States stores chemical agent-filled rockets, bombs and artillery shells. The two types of agent in the U.S. chemical weapons stockpile are blister and nerve agents.

#### **BLISTER AGENTS**

Blister agents are oily liquids that can smell like garlic, onion or mustard, leading to the name "mustard agent." Blister agents in the stockpile are H, HD and HT, which are all variations of mustard agent. These agents burn or blister the skin, eyes and respiratory system. Exposure to blister agents usually is not fatal unless the agents are inhaled. In general, blister agents do not dissolve in water and can last a long time in the environment. BGCA and PCD both store mustard agent-filled munitions.

#### **NERVE AGENTS**

Nerve agents are clear, colorless liquids that affect the body's central nervous system. These agents can be fatal if inhaled or absorbed through the skin. Two kinds of nerve agent are stored in the stockpile in Kentucky.

- ☐ G-type agent is similar to a strong pesticide. This liquid evaporates at about the same rate as water.
- □ V-type agent looks like motor oil. Known as a persistent agent, this thick liquid evaporates slowly.



## **DESTROYING THE STOCKPILES**

Decades after their production, the United States had chemical weapons and chemical agents that it no longer wanted or needed. The Chemical Weapons Convention requires that they be destroyed. Nearly 90 percent of the stockpile has been destroyed at seven sites, using incineration of agent in storage containers and munitions in Alabama, Arkansas, Oregon, Utah and Johnston Atoll, and neutralization of agent in storage containers in Maryland and Indiana.

Congress directed the establishment of the Program Executive Office, Assembled Chemical Weapons Alternatives in 1996 to evaluate alternatives to the incineration of chemical weapons, resulting in the selection of neutralization for the stockpiles in Colorado and Kentucky. The facilities for stockpile disposal are built with multiple, redundant safety features. Destruction facilities are located near the storage areas so these weapons do not have to be moved long distances.

For more information about PEO ACWA's work to destroy the stockpiles, visit www.peoacwa.army.mil.

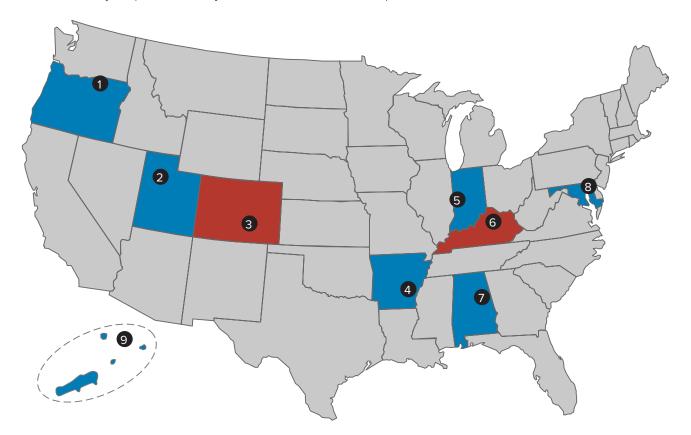






## SAFE, SECURE STOCKPILE STORAGE

Stockpiles of chemical weapons originally were stored at eight locations across the United States and on Johnston Atoll in the South Pacific. Disposal operations have since been completed at all but two locations: at Blue Grass Army Depot, Kentucky, and Pueblo Chemical Depot, Colorado.



	STOCKPILE	PERCENTAGE OF ORIGINAL U.S. STOCKPILE <sup>1</sup>	INCINERATION	NEUTRALIZATION
1	Umatilla Chemical Depot, OR	12%	Completed October 2011	
2	Deseret Chemical Depot, UT	44%	Completed January 2012	
3	Pueblo Chemical Depot, CO*	8%		Started operations March 2015
4	Pine Bluff Chemical Activity, AR	12%	Completed November 2010	
5	Newport Chemical Depot, IN	4%		Completed August 2008
6	Blue Grass Chemical Activity, KY*	2%		Started operations June 2019
7	Anniston Chemical Activity, AL	7%	Completed September 2011	
8	Edgewood Chemical Activity, MD	5%		Completed February 2006
9	Johnston Atoll	6%	Completed November 2000	

<sup>&</sup>lt;sup>1</sup> Approximate percentage of U.S. stockpile at the time the U.S. entered the CWC.

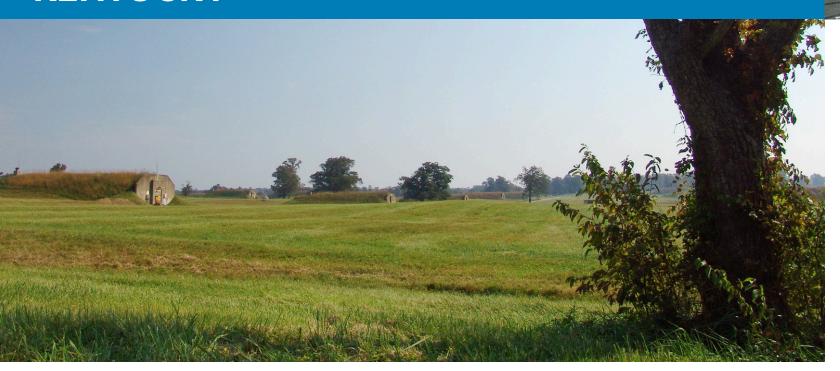
<sup>\*</sup> The Colorado and Kentucky chemical stockpile destruction programs are managed by the Department of Defense Program Executive Office, Assembled Chemical Weapons Alternatives.

# BLUE GRASS CHEMICAL ACTIVITY KENTUCKY









Blue Grass Chemical Activity is located on Blue Grass Army Depot, approximately 30 miles southeast of Lexington, Kentucky. It stores two percent of the original declared U.S. chemical weapons stockpile on 250 acres of the depot. Agent destruction operations began in June 2019 at the Blue Grass Chemical Agent-Destruction Pilot Plant, with operators working to meet a Congressionally mandated deadline of December 2023.

The original chemical stockpile consisted of 523 tons of nerve or blister agents in projectiles and rockets. The stockpile is stored in earth-covered igloos, designed to protect their contents from external factors such as storms, lightning and other weather-related events. The entire storage area is protected by physical and electronic security features. Experienced chemical operations crews inspect and monitor storage igloos routinely with detection equipment, providing protection for personnel, the public and the environment.

BGCA's Emergency Operations Center (EOC) is staffed continuously by highly trained technicians. The stockpile is surrounded by numerous meteorological towers transmitting current weather data to the EOC, where technicians produce daily work plans before any work is done. If the data indicates a potential chemical hazard would leave the depot in an accident, the plan is altered to exclude that task. Army work plans are communicated to the 10 surrounding counties and the Commonwealth of Kentucky, so all emergency response centers are aware of stockpile activities.

Ten counties in Kentucky are part of the chemical stockpile program, sharing with the state a commitment to preparedness and response, and to public education and outreach. Areas in the rest of Estill, Clark, Garrard, Jackson, Powell and Rockcastle counties are included in the Protective Action Zone (PAZ), as is a portion of Fayette County. Jessamine, Laurel and the rest of Fayette are "host counties," where residents of the IRZ or PAZ may be relocated.

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#### **CSEPP COUNTIES**

Notify and direct emergency response actions for their local communities 90

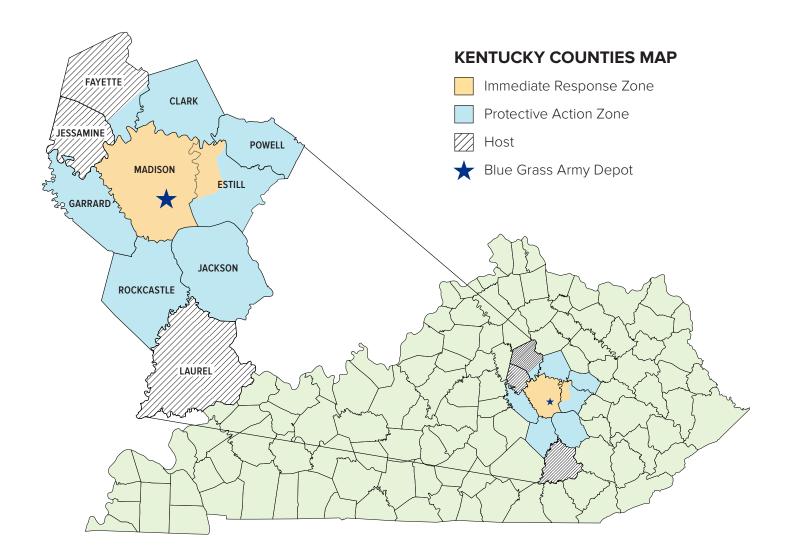
HIGH-TECH OUTDOOR SIRENS

Located in heavily populated areas

30,000+

#### IN-HOME ALERT RADIOS

Distributed to residents in selected zones



# PUEBLO CHEMICAL DEPOT COLORADO

Pueblo Chemical Depot is in southeastern Colorado, approximately 14 miles east of the City of Pueblo. It stores eight percent of the original declared chemical weapons stockpile. PCD encompasses approximately 23,000 acres. The original chemical stockpile consisted of 2,600 tons of blister agent in approximately 780,000 munitions. Agent destruction operations began in March 2015 at the Pueblo Chemical Agent-Destruction Pilot Plant, with operators working to meet a Congressionally mandated deadline of December 2023.

Since CSEPP began, the depot, Pueblo County, the U.S. Army, the State of Colorado and FEMA have worked together to improve community protection. The bulk of the improvements and equipment provided through CSEPP are available for use in the event of any kind of emergency, and will remain in place even after the stockpile is destroyed.

Although the possibility of an emergency involving the stored chemical weapons at Pueblo Chemical Depot is extremely unlikely, an important function of emergency planning is the identification of those areas that could be affected in an emergency.

CSEPP-funded benefits include training and protective equipment for emergency responders, communications and alert equipment, and improved EOCs. Approximately 1,000 people are trained annually, and an annual exercise tests the response capabilities of all cooperating agencies.

Once the stockpile is destroyed, the depot's land will be transferred back to the community through the Local Reuse Authority, known as PuebloPlex. This will provide a new opportunity for Pueblo's economic growth and public use.

For any issues related to the possible discovery of sacred sites and cultural resources, contact the PCD Environmental Management Office at (719) 549-4252.













22

#### OUTDOOR WARNING SIRENS

Strategically located in communities near the depot

1875+

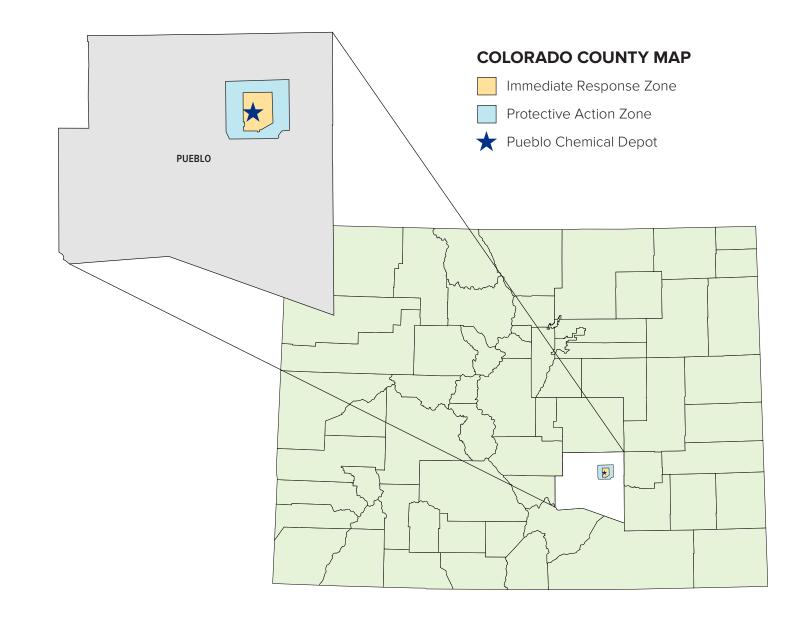
#### **WEATHER RADIOS**

Delivered to occupied structures in Pueblo County

180

#### SHELTER-IN-PLACE

Kits delivered to occupied structures in the IRZ



10

## WHAT CAN YOU DO?

### Preparing for any type of emergency begins with you.

#### **BE INFORMED**

Know what disasters could affect your area, how to get emergency alerts, and where you would go if you and your family need to evacuate. Research what to do before, during and after each type of emergency that could strike your community.



HAZARDOUS MATERIALS











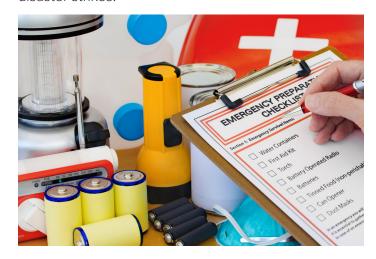


Make a plan today. Your family may not be together if a disaster strikes, so know how you'll contact one another and reconnect if separated. Establish a family meeting place that's familiar and easy to find. And don't forget to make a plan for your pet.



### **BE PREPARED, BUILD A KIT**

After an emergency, you may need to survive on your own for several days. Being prepared means having your own food, water and other supplies to last for at least 72 hours. That's why it's important for families to work together to build an emergency kit before disaster strikes.



Contact your local Emergency Management Agency with questions. Planning and preparation can help you get through many emergency situations.

For further information, visit: www.ready.gov, www.prepareky.com, www.preparepueblo.com.







#### SAFE TODAY, SAFER TOMORROW





