



## BLUE GRASS ARMY DEPOT

Blue Grass Army Depot (BGAD), located in the center of Madison County, is a traditional Army Depot with the primary mission of receiving, storing, renovating, maintaining, demilitarizing and shipping “conventional” munitions, ranging from .22 caliber bullets to 500-pound bombs. More than 900 earth-covered storage bunkers, or igloos, cover the majority of the Depot’s approximate 15,000 acres.

Located within those boundaries are 250 acres (5 percent of the Igloos) dedicated to the storage of non-conventional or “chemical” munitions, now awaiting destruction. The Blue Grass Chemical Activity (BGCA), a subordinate unit to the U.S. Army Chemical Materials Activity and a tenant on BGAD, is the organization responsible for the safe and secure storage of the chemical munitions until the time they are demilitarized.

Since 1944, the Army has safely stored nearly 2% of the nation’s original chemical weapons stockpile at BGAD, with the first munitions arriving in 1944.

BGCA’s stockpile consists of nerve agents GB and VX and blister agent H totaling 523 tons of chemical agents.



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CSEPP was developed to bring together federal, state and local government agencies to ensure public safety and that local agencies and communities are ready to handle any type of emergency. A primary goal of CSEPP is to also improve preparedness of citizens in the event of a chemical munitions accident at the Blue Grass Army Depot.

The [www.PrepareKY.com](http://www.PrepareKY.com) website contains a wide range of information to help communities prepare in the event of an emergency. From this site, residents can also link to their own county CSEPP websites for information on preparedness in their specific area.



**For more information:  
[www.garrardema.com](http://www.garrardema.com)  
Email: [garrardpio@gmail.com](mailto:garrardpio@gmail.com)**

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Chemical Stockpile Emergency Preparedness Program  
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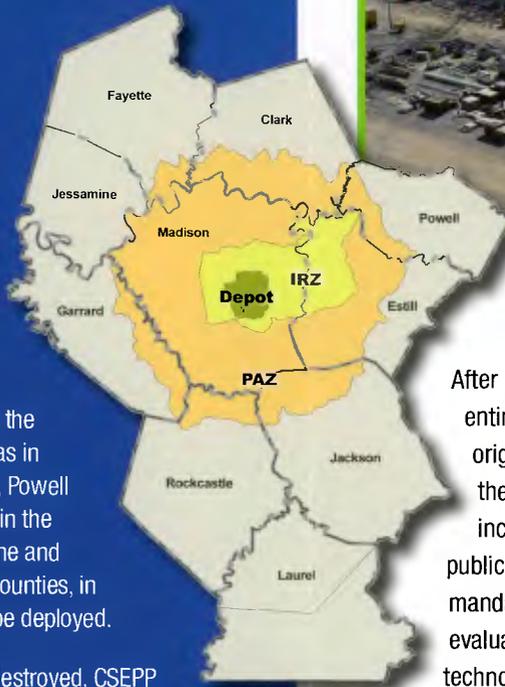
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The Chemical Stockpile Emergency Preparedness Program (CSEPP) was created in 1985 when the US Congress passed a law directing the Army to dispose of its aging chemical weapons inventory with maximum protection of the public and environment as its primary consideration.

Since its inception, the primary goal of CSEPP has been to educate and enhance emergency preparedness in communities surrounding the chemical stockpile stored at the Bluegrass Army Depot.

There are 10 counties in Kentucky which are affected by the chemical stockpile. Madison County, where the Bluegrass Army Depot is located, and the northwest portion of Estill County are considered the Immediate Response Zones (IRZ). Areas in Clark, Estill, Fayette, Garrard, Jackson, Powell and Rockcastle counties are included in the Protective Action Zone (PAZ). Jessamine and Laurel Counties are considered Host counties, in which citizens of the IRZ or PAZ may be deployed.

Until the chemical stockpile is safely destroyed, CSEPP will continue to support efforts to ensure a community's preparedness and safety in the unlikely event of a chemical agent accident.



## CHEMICAL DEMILITARIZATION

After Congress directed the Army to destroy its entire stockpile of chemical weapons, the Army's original plan was to destroy the stockpile at the Blue Grass Army Depot by constructing an incineration facility. However, in response to public concerns regarding incineration, Congress mandated the Army and Department of Defense evaluate the effectiveness of alternative destruction technologies.

After a comprehensive evaluation process, the Department of Defense selected neutralization followed by supercritical water oxidation (SCWO) as the method of destruction. During the neutralization process, munitions are disassembled using modified reverse assembly. After the agent and energetics are separated, they are chemically decomposed and neutralized by caustic or water hydrolysis. The resulting chemical compounds are known as "hydrolysates." The agent hydrolysate and energetics hydrolysate are destroyed using SCWO units. The SCWO process subjects the hydrolysates to very high temperature and pressure, breaking them down into carbon dioxide, water and salts. Metal parts are thermally decontaminated in a heated discharge conveyor. Dunnage, or materials such as the wooden pallets upon which the weapons are stored, are

destroyed in the SCWO process. Solid effluents are recycled or tested prior to disposal in permitted landfills. Gas effluents are recycled or filtered and monitored before release into the atmosphere.



Through collaborative efforts, BGAD and the Assembled Chemical Weapons Alternatives (ACWA) program have worked with the community in selecting the neutralization followed by the SCWO process as the technology to destroy the chemical weapons being stored. The Bechtel Parsons Blue Grass Team was awarded a contract to design, construct, test, operate and close the Blue Grass Chemical Agent-Destruction Pilot Plant.



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