

US to destroy its largest remaining chemical weapons cache

February 4 2015, by Dan Elliott



In this Jan. 29, 2015 photo, protective suits for workers used in chemical munitions destruction hang inside the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)

The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, marking a milestone in the

global campaign to eradicate a debilitating weapon that still creeps into modern wars.

The Pueblo Chemical Depot in southern Colorado plans to start neutralizing 2,600 tons of aging mustard agent in March as the U.S. moves toward complying with a 1997 treaty banning all chemical weapons.

"The start of Pueblo is an enormous step forward to a world free of chemical weapons," said Paul Walker, who has tracked chemical warfare for more than 20 years, first as a U.S. House of Representatives staffer and currently with Green Cross International, which advocates on issues of security, poverty and the environment.

The work starts less than a year after chlorine gas killed 13 people in Syria in April 2014. International inspectors concluded last month that the gas had been used as a weapon.

Before the chlorine attack, 1,400 people were killed in a 2013 nerve gas attack in Syria, the U.S. said.

Pueblo has about 780,000 shells containing mustard agent, which can maim or kill, blistering skin, scarring eyes and inflaming airways. Mustard agent is a thick liquid, not a gas as commonly believed. It's colorless and almost odorless but got its name because impurities made early versions smell like mustard.

After nightmarish gas attacks in World War I, a 1925 treaty barred the use of chemical weapons, and the 1997 Chemical Weapons Convention set a 2012 deadline to eradicate them. Four nations that acknowledged having chemical weapons have missed the deadline: the U.S., Russia, Libya and Iraq.

The cost of safely destroying the weapons, and concerns about public health and the environment, have slowed the process, experts say. Violence in Iraq also has been an obstacle.



In this Jan. 29, 2015 photo, project manager Steve Bird holds an inert 105mm shell as he demonstrates the use of the explosive destruction system used for destruction of leaky or otherwise problematic chemical munitions, inside the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)

Libya expects to finish in 2016 and Russia in 2020, according to the Organization for the Prohibition of Chemical Weapons, which oversees the Chemical Weapons Convention. Iraq's completion date is unknown.

The U.S. amassed 30,600 tons of chemical weapons, both mustard agent and deadly nerve agent, much of it during the Cold War. The Army described them as a deterrent, and the U.S. never used them in war.

Nearly 90 percent of the U.S. stockpile has been eliminated at depots in Alabama, Arkansas, Indiana, Maryland, Oregon, Utah and Johnson Atoll in the Pacific, mostly by incineration.

Coloradans worried, however, about mercury vapor from incineration, said Irene Kornelly, a member of the Pueblo Citizens Advisory Commission, a liaison group established by Congress. The opposition in Colorado and in Kentucky, where chemical weapons are stored at the Blue Grass Army Depot in Richmond, prompted Congress to order alternatives.

The Army will use two methods for the Pueblo stockpile. In March, the first of an estimated 1,400 shells that are leaking or otherwise damaged will be placed in a sealed steel chamber with walls up to 9 inches thick. Explosives will tear open the shells, and the mustard agent will be neutralized with chemicals.

The remaining hundreds of thousands of shells will be run through a partially automated, \$4.5 billion plant starting in December or January. It will dismantle the shells, neutralize the mustard agent in water, and then add bacteria to digest and convert the remaining chemicals. The end product can be disposed of at a hazardous waste dump.

The plant can process up to 60 shells an hour, but the explosion chamber can destroy just six shells a day.



In this Jan. 29, 2015 photo, inert 105mm shells sit in the entry point of the explosive destruction system used for destruction of leaky or otherwise problematic chemical munitions, inside the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)

Pueblo expects to finish the job in 2019—more than 55 years after some of the shells there were produced.

Blue Grass won't start destroying weapons until 2016 or 2017, finishing in 2023, Army spokeswoman Kathy DeWeese said. All told, it's costing about \$11 billion to destroy remaining U.S. chemical weapons.

Blue Grass has 523 tons of chemical weapons, only about one-fifth as many as Pueblo, but it has nerve agent, and some of the mustard agent is

so old it has solidified and is more difficult to deal with, DeWeese said.

Officials who oversee the Pueblo operation insist it is safe, citing years of careful planning and training, as well as the remote location—an empty expanse of sagebrush some 15 miles from the city's outskirts.



In this Jan. 29, 2015 photo, inert simulated 155mm chemical munitions used for training are stored on a pallet inside a hardened hangar at the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)

Army Lt. Col. Mike Quinn declined to discuss the specifics of security at the 36-square-mile depot, but signs warn, "Use of deadly force authorized."

Kornelly said she has no remaining concerns, but she's not ready to celebrate.

"I think once we start seeing the weapons go through, there'll be a feeling of accomplishment," she said. "Right now, everyone's on pins and needles."



In this Jan. 29, 2015 photo, a munitions worker stands near inert simulated 155mm chemical munitions used for training inside a hardened hangar at the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)



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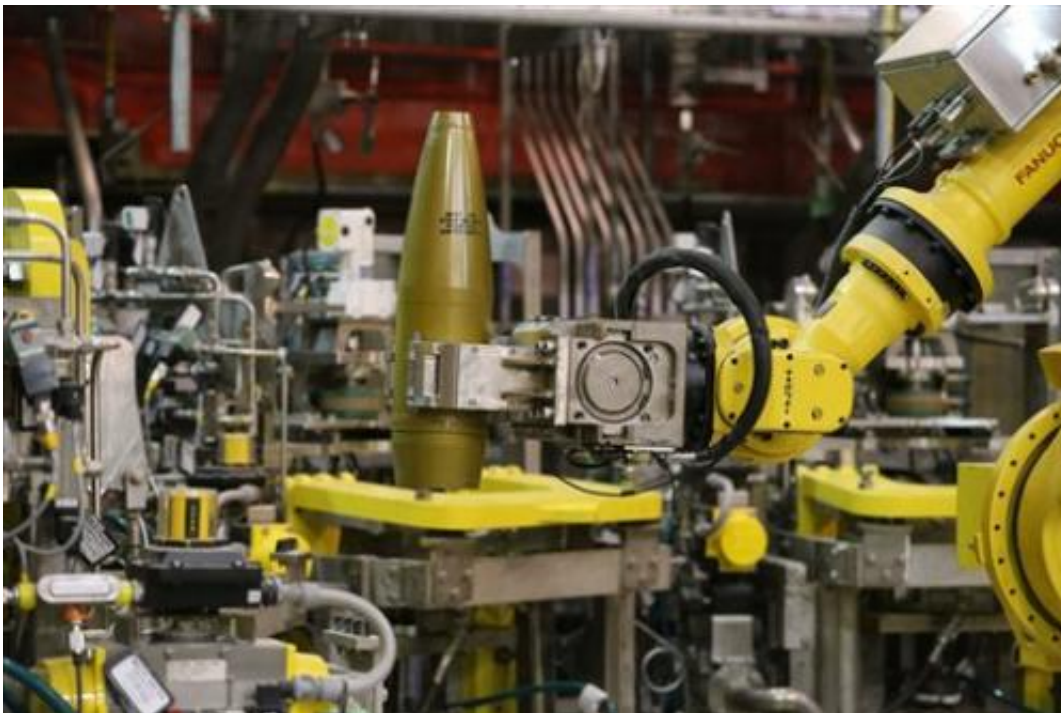
In this Jan. 29, 2015 photo, an ordinance technician uses a robot to to handle inert simulated chemical munitions used for training at the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)



In this Jan. 29, 2015 photo, an ordinance technician uses a robot to handle inert simulated chemical munitions used for training at the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)



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In this Jan. 29, 2015 photo, robots are remotely controlled to to handle inert simulated chemical munitions used for training at the Pueblo Chemical Depot, east of Pueblo, in southern Colorado. The United States is about to begin destroying its largest remaining stockpile of chemical-laden artillery shells, a milestone in the global campaign to eradicate a debilitating weapon that still creeps into modern wars. (AP Photo/Brennan Linsley)

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