



U.S. Army Element, Assembled  
Chemical Weapons Alternatives

# ACWA QUARTERLY BRIEF

A Partnership for Safe Chemical Weapons Destruction

September 2011



## MESSAGE FROM THE ACTING PROGRAM MANAGER

Here at the Assembled Chemical Weapons Alternatives (ACWA) program, our goal of safely destroying the final 10 percent of the US chemical stockpile remains unwavering. As I reported to you in June, following the Nunn-McCurdy review and certification, we are proceeding without significant changes to the chosen destruction technologies: neutralization followed by biotreatment in Colorado and neutralization followed by supercritical water oxidation in Kentucky.



### Leadership in Action

*From right, ACWA Acting Program Manager Conrad Whyne traveled to Pueblo in August to meet with Lt. Col. Tim Greenhaw, Pueblo Chemical Depot Commander, as well as local community members.*

While we originally planned to use an Explosive Destruction Technology, or EDT, for problem munitions in Colorado, we are also considering the use of an EDT to remedy problematic mustard munitions in Kentucky. The preliminary findings of the X-ray campaign to assess those munitions were conveyed to our Blue Grass stakeholders earlier this month.

You may also recall from last quarter that we are working on a new cost and schedule baseline. With designs complete at both sites and the experience of several years of construction behind us, we are able to take a more realistic view of the road ahead. This ability to continually refine our estimates is an important management tool that helps us identify the risks inherent in building these unique facilities so that we might muster the right resources to minimize those risks.

In 2006, we estimated that the U.S. would be able to destroy only 66 percent of its total chemical stockpile by the extended treaty deadline of April 29, 2012. By the timely application of resources to mitigate the risks we estimated five years ago, we are now on track to destroy nearly 90 percent of the stockpile by that date. I want to assure you that the same dedicated effort is being made in the ACWA program as we evaluate options for bettering these schedules. We are pledged to 100 percent destruction of the U.S. chemical stockpile and we will continue to keep you informed of our progress every step of the way. Thank you for helping us achieve this critically important national goal.

Your involvement in the ACWA program is absolutely vital to its success.

**Conrad F. Whyne**  
Acting Program Manager  
U.S. Army Element, ACWA

## BLUE GRASS CHEMICAL AGENT-DESTRUCTION PILOT PLANT (BGCAPP) UPDATE

The BGCAPP team is currently preparing for a key installation during which workers will use a crane to safely hoist and install a pair of large, stainless steel vessels known as agent neutralization reactors inside one of the BGCAPP's main processing facilities – the Munitions Demilitarization Building. The Munitions Demilitarization Building is where chemical weapons will be disassembled, have their explosives removed and their agent drained and neutralized.



### BGCAPP's Big Addition

*A worker welds steel for the air plenum that was placed on top of the Control and Support Building in August. A total of three large plenums will eventually be placed; they will control the pilot plant's cascading ventilation system, which regulates air pressure in each building.*

In other areas of the pilot plant, another building “went vertical” this quarter – the Supercritical Water Oxidation Processing Building. Known as the SCWO Building, it will house all the equipment needed for BGCAPP's secondary treatment process. Reinforcing steel and concrete placements continue for the Munitions Demilitarization Building, as well as the installation of metal wall studs and sheet rock in the Control and Support Building, which will serve as the nerve center of the pilot plant. Additionally, the Laboratory's foundation work was completed, which will be used to analyze samples from the plant's processes and conduct testing to satisfy international treaty obligations.



### Count'em Up

*Cranes are a sign of progress in any city or town. This rings true at the BGCAPP construction site, where six cranes lined the skyline this August, as construction began on a piperack. The piperack will hold the piping needed to carry water and process chemicals around the facility.*



## PUEBLO CHEMICAL AGENT-DESTRUCTION PILOT PLANT (PCAPP) UPDATE

In July, Immobilized Cell Bioreactors were set on their pads in the Biotreatment Area, where all equipment that will facilitate the pilot plant's secondary treatment process is located. The last vertical structure, the Filter Press Building located in the Biotreatment Area, is nearly complete. There were also more equipment installations within the buildings where the bulk of the destruction operations will occur, including more titanium piping in the Agent Processing Building and robotic and conveyor systems in the Enhanced Reconfiguration Building.



### Recess Road Tripping

The Pueblo Chemical Agent-Destruction Pilot Plant received two Congressional visits during Congress' annual summer recess. At left, the team hosts Senator Mark Udall (D-Colo.) and at right Jeff Small and Dustin Sherer, center, members of U.S. Rep. Scott Tipton's (R-Colo.) staff, as they tour the Enhanced Reconfiguration Building.



### Pounding the Pavement

During the next several months, the PCAPP team will be busy doing roadwork in and around the construction site. Workers pave roadways on the west side of the Automated Guided Vehicle Corridor, through which chemical weapons will travel to their destruction. Roadways will create a mobilization route across the site, as well as aid in site drainage.

## NEXT 90 DAYS AT ACWA

**Blue Grass X-ray Results:** ACWA, in coordination with Blue Grass Army Depot, Blue Grass Chemical Activity and the Project Manager Non-Stockpile Chemical Materiel leadership, will analyze data garnered from an X-ray assessment of a sample of mustard projectiles in storage in Kentucky. The analysis will help determine if a portion of the stockpile may need to be destroyed using an Explosive Destruction Technology.

**Blue Grass Construction:** The project is on pace to receive and place 20 laboratory building modules atop the completed concrete foundation during the next quarter. The Laboratory will handle and analyze low concentrations of chemical agent when BGCAPP operations begin.

**Pueblo Construction:** Key upcoming activities at Pueblo include the complete construction of the Enhanced Reconfiguration Building, which will include the arrival and placement of First-Of-A-Kind equipment and electrical cabinets in the building's Explosion Containment Rooms.



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