



U.S. Army Element, Assembled  
Chemical Weapons Alternatives

# ACWA QUARTERLY BRIEF

A Partnership for Safe Chemical Weapons Destruction

September 2008



## HOT TOPICS

**Workers Break Ground for Operation *Swift Solution*.** Site preparation work for Operation *Swift Solution* continued throughout the summer, as workers leveled the ground and placed the concrete pad for the operations structure. Additionally, the ACWA and Blue Grass Army Depot environmental teams submitted an additional Temporary Authorization Request, or TAR, on Sept. 4, 2008, to amend the depot's existing hazardous waste storage permit and allow for the storage of secondary waste generated during the operation for more than 90 days. *Swift Solution* will safely eliminate a mixture of the nerve agent GB (sarin) and its breakdown products, as well as the deteriorating steel containers and wastes associated with management of these containers.

**Lawsuit Filed for Destruction of Colorado Stockpile.** Department of Defense legal authorities are reviewing a formal complaint filed by the Colorado Department of Public Health and Environment in U.S. District Court requesting the court require the U.S. Department of Defense (DoD) to treat and destroy chemical weapons stored at the U.S. Army Pueblo Chemical Depot by Dec. 31, 2017, as is also required under Public Laws 110-116 and 110-181. In compliance with the laws, DoD sent to Congress on June 30, 2008, an assessment of options for accelerating stockpile destruction to meet the 2017 completion date. The Department continues to review these options, and the results will be presented to Congress in February 2009 with the Fiscal Year 2010 President's Budget. The lawsuit comes after DoD notified the state of its intention to appeal an Administrative Order issued by the state on June 17, 2008.

**Explosive Destruction Technology (EDT) Study Under Way.** The National Research Council (NRC) is assessing state-of-the-art government and commercially-developed explosive destruction technologies designed to eliminate chemical munitions in support of the ACWA program. Findings will assist the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) team to identify a technology to destroy leaking mustard munitions and contaminated explosive components, an approved concept in the PCAPP design. Additionally, the June 2008 Chemical Demilitarization Program acceleration assessment includes an option that would use an EDT at the Blue Grass site to allow the facility to process two types of munitions simultaneously. If the acceleration option moves forward, the NRC study will assist in determining a potential EDT technology selection for the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP). The report is due in early 2009.



### **Vertical Construction Continues in Kentucky**

*To date, three key building structures, a high-voltage electrical substation (shown above), fencing, roads, and various foundations and underground utilities have been completed at BGCAPP. As construction has progressed, the Blue Grass team has maintained its commitment to safety and surpassed 3 million job hours without a lost-time injury on July 31, 2008.*

## PILOT PLANT UPDATES

### **Blue Grass Chemical Agent-Destruction Pilot Plant**

**Design Status:** Only 17% of the pilot plant design remains to be completed including structures such as: the hydrolysate storage area, above ground site utility systems, the entry control facility and the container handling building. Additionally, portions of the munitions demilitarization building explosive containment area are being redesigned. The initial design approach was proposed to remedy constructability challenges associated with placing concrete in heavily reinforced walls. Explosive designs require acceptance by the Department of Defense Explosives Safety Board and the U.S. Army Corps of Engineers. Based on the time needed to collect additional data that would validate the proposed design, the team has reverted to a more traditional design in order to recover schedule.

**Acquisitions:** Bechtel Parsons Blue Grass has awarded more than \$59 million in subcontracts, 55% obtained by Kentucky businesses.

**Construction Update:** In mid-August, a huge crane lifted 65-ton components into place for the high-voltage electrical substation that will supply power to the plant. Several major concrete placements were recently completed for the control support building and installation of underground utilities continues.



*The skyline at the BGCAPP facility is rapidly changing as two new structures – the personnel support building and the maintenance building – are nearing completion.*



## Pueblo Chemical Agent-Destruction Pilot Plant

**Acquisitions:** Bechtel Pueblo has awarded more than \$112 million in subcontracts, 56% obtained by Colorado businesses.

**Construction Update:** Concrete placement continues in the agent processing building, along the automated guided vehicle corridor, in the enhanced reconfiguration building and for miscellaneous foundations throughout the area. Four large tanks for the PCAPP agent processing building were delivered in August - two hydrolysate holding tanks, a hot process water tank and a breathing air tank. Installation of pipe rack steel continues and installation of the cooling tower units has begun.

**Safety:** The Bechtel Pueblo team has been nominated for Star Status in the Occupation Safety and Health Administration's Voluntary Protection Program (VPP). The VPP recognizes and partners with worksites that show excellence in occupational safety and health. Star Status is the highest level of recognition, and is only given to companies that have achieved injury and illness rates at or below the national average for their respective industries. The official acceptance of Bechtel Pueblo to the VPP requires approval from the Secretary of Labor; the award is expected to be presented to the team this winter.



Four large tanks for the PCAPP agent processing building were delivered in August - two hydrolysate holding tanks, a hot process water tank and a breathing air tank.

## NEXT 120 DAYS AT ACWA

Key ACWA priorities for the next quarter include:

- The Colorado state health department is currently finalizing the PCAPP Phase III permit. This permit will allow the PCAPP team to build the portions of the pilot plant that will house demilitarization systems and equipment, as well as allowing for the commissioning and systemization activities. The state health department has indicated that the permit should be finalized before December.
- On June 30, 2008, DoD provided Congress three options for meeting the congressional mandate under Public Laws 110-116 and 110-181, which requires the destruction of the U.S. chemical weapons stockpile no later than Dec. 31, 2017. DoD subsequently initiated a schedule assessment of the option that focuses on accelerating the ACWA program. ACWA staff will continue to work with DoD leadership to complete the schedule assessment in preparation for inclusion of the results in the President's FY 2010 budget request.
- ACWA is expecting the release of two technical studies this fall: a Noblis technical analysis of off-site shipment of hydrolysate and a National Research Council (NRC) study on secondary waste. Noblis was tasked to perform a programmatic cost and schedule assessment of the off-site disposal of agent hydrolysate, which is the byproduct of the neutralization process; the NRC was tasked to perform an independent programmatic assessment of the off-site disposal of secondary wastes, including hydrolysates. With the upcoming release of these studies, ACWA leadership is planning to review the data with stakeholders and make a decision regarding the off-site shipment of hydrolysate in the first quarter of FY 2009.
- ACWA anticipates approval from the Kentucky Department for Environmental Protection to start destruction operations in October for Operation *Swift Solution*, which will eliminate a mixture of GB nerve agent and breakdown products in three steel containers and their associated wastes currently in storage at the Blue Grass Army Depot. Destruction operations are expected to be complete by December 2008.

### FOR MORE INFORMATION

U.S. Army Element, Assembled Chemical Weapons Alternatives, known as ACWA, is responsible for the safe destruction of chemical weapons stockpiles at the U.S. Army Pueblo Chemical Depot in Colorado and the Blue Grass Army Depot in Kentucky.

Monthly status updates on chemical weapons destruction in Colorado and Kentucky can be found at [www.pmacwa.army.mil](http://www.pmacwa.army.mil).

For additional information, please contact the ACWA Communications and Congressional Affairs office at (410) 436-3398.