



U.S. Army Element, Assembled
Chemical Weapons Alternatives

ACWA QUARTERLY BRIEF

A Partnership for Safe Chemical Weapons Destruction

September 2012



HOT TOPICS

Explosive Destruction Technology Plans Moving Forward. Plans to implement an Explosive Destruction Technology (EDT) to augment the Pueblo Chemical Agent-Destruction Pilot Plant continue to advance at the U.S. Army Pueblo Chemical Depot. In August, Assembled Chemical Weapons Alternatives and depot officials determined that the installation and operation of an EDT at the depot will have no significant environmental impacts. The EDT facility is necessary to eliminate a limited portion of the depot's inventory of chemical munitions that present a problem to destroy in the main plant. In April 2012, an environmental assessment was completed to meet the requirements of the National Environmental Policy Act, or NEPA, and Title 32 Code of Federal Regulations Part 651, to address any potential impacts of the installation and operation of an EDT at the depot. In accordance with the NEPA process, a draft Finding of No Significant Impact was prepared and provided for an extended public comment period. Following review of the comments received, it was concluded that no additional analysis was necessary for this proposed action.

An environmental assessment is also in development for the installation and operation of an EDT at the Blue Grass Army Depot. EDT is being considered as a means to safely destroy about 15 percent of the Blue Grass stockpile which consists of mustard-filled 155mm projectiles. Information obtained through a non-intrusive X-ray assessment of the 155mm projectiles, completed in 2011, showed a significant portion of the munitions contained "heel" or solidified material that could make destruction difficult. As a result of lessons learned at other chemical weapons destruction facilities, the potential use of an EDT will allow the munitions to be destroyed in a manner that maximizes the safety of the workforce and the environment.

Major Milestone Now Set in Stone in Kentucky. The final structural concrete placement was completed this quarter for the Munitions Demilitarization Building (MDB), the main processing building where chemical weapons will be destroyed at the Blue Grass Chemical Agent-Destruction Pilot Plant. The team completed concrete placement of the sloped roof of the Unpack Area, where munitions will be removed from their protective transport containers and entered into the destruction process. The final placement was 158 cubic yards of concrete, which equates to about 16 standard cement-mixer truckloads. With concrete placement finalized, MDB construction activities will mostly move indoors with preparation for and application of concrete coating, as well as installation of wall panels, lighting, piping, wiring, fixtures and equipment. The current schedule forecasts MDB construction to be completed in 2016.



Concrete Evidence of Progress

Blue Grass workers place concrete on an elevated slab over the Unpack Area of the Munitions Demilitarization Building earlier this year.

 [Launch Video of Concrete Placement](#)



Tipton Proud of Progress at PCAPP

U.S. Rep. Scott Tipton (R-Colo.), center, toured a storage igloo during his visit to the Pueblo Chemical Depot and the Pueblo Chemical Agent-Destruction Pilot Plant on Aug. 23. Quality Assurance Specialist (Ammunition Surveillance) Lis Wachutka shares how ACWA Test Equipment will be used to ensure the plant is ready for operations, as Lt. Col. Tim Greenhaw, PCD commander, looks on.

MESSAGE FROM THE PROGRAM EXECUTIVE OFFICER

The start of the new fiscal year marks an important change for the Assembled Chemical Weapons Alternatives (ACWA) program.



Effective Oct. 1, 2012, ACWA's administrative alignment shifted from the U.S. Army Materiel Command (AMC) to the U.S. Army Acquisition Support Center (USAASC). This new alignment will be invisible to most of our stakeholders, and it won't change our mission or the critical tasks currently at hand. But, it formally changes our name to Program Executive Office, ACWA and warrants acknowledgement for a variety of other reasons.

Although the ACWA program reports directly to the Department of Defense as mandated by Congress, it has always been administratively aligned within the Army to ensure the organization is properly resourced. Since 2007, as part of AMC, and under the leadership of Gen. Ann E. Dunwoody (Ret.) and now Gen. Dennis L. Via, the program entered its most dynamic time. We owe the AMC staff our thanks for the many years of support they provided as we completed the design phase and accelerated full throttle into the construction and systemization phases of our chemical weapons destruction facilities.

Now we look forward to forging a similarly productive relationship with USAASC, a Direct Reporting Unit under the Assistant Secretary of the Army for Acquisition, Logistics, and Technology. USAASC is well known for the quality of its personnel development systems and management support capabilities.

This internal adjustment is primarily administrative and designed to ensure the ACWA workforce has the necessary support and resources to excel. As such, we remain focused on finalizing the construction and systemization of our facilities, we remain committed to upholding safety and environmental protection as our top priorities, and we look forward to continuing to work with our stakeholders to realize the safe destruction of the chemical weapons stockpiles in Colorado and Kentucky.

Conrad F. Whyne
Program Executive Officer



PILOT PLANT UPDATES

Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP)

Construction Update:

The Blue Grass team has continued steelwork and installing heating, ventilation and air-conditioning (HVAC), as well as electrical and piping systems in other areas of the construction site. The pilot plant is taking shape as workers install interior steel in the Munitions Demilitarization Building and rebar for the nitrogen equipment pad adjacent to the Utility Building (UB) while welding is under way for the structural frame of the Supercritical Water Oxidation Processing Building. In the Control and Support Building (CSB), which will house the control room and integrated control system for plant operations, workers are installing a complex network of subflooring and electrical infrastructure in the instrument rack rooms. Electrical, piping, and HVAC systems are being prepared and installed in the UB, CSB and Laboratory Building.



Nose to the Grindstone

BGCAPP craft workers carefully prepare electrical cable trays for installation inside the Utility Building which will house equipment to produce steam, compressed air, chilled water and hot water for operations.

Systemization Update: The Rocket Shear Machine and the Rocket Cutting Machine have completed testing at the Pasco, Wash., facility and have arrived at BGCAPP.



Measuring Twice, Cutting Once

A BGCAPP craft worker cuts piping for installation inside the Control and Support Building (CSB). The CSB will house the control room and integrated control system for plant operations.

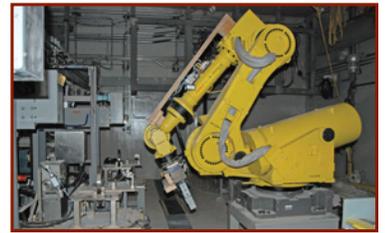
Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP)

Construction Update:

Workers have continued hammering away at the last of the construction activities on PCAPP, bringing the site closer to construction completion. In the Enhanced Reconfiguration Building, where munitions will be disassembled, workers have finished installing equipment that will monitor energetic components and munitions bodies. Electrical installations are also being made in the Brine Reduction System, where the byproduct of the chemical agent neutralization process will be treated. Hydro testing is complete on the Brine Concentrator Feed tanks and 30-day hydrolysate storage tanks, and final site grading has begun. In the Agent Processing Building, Laboratory Building and Entry Control Facility, electrical installations continue as coatings are being prepared and applied elsewhere on the site for the Munitions Service Magazine Area and Immobilized Cell Bioreactors.

Systemization Update:

Additional buildings and systems in the Entry Control Facility, Enhanced Reconfiguration Building and Agent Processing Building were turned over from the construction team to the systemization team, which ensures buildings and systems are ready for operations.



Ready, Set, Test

All three PCAPP Projectile/Mortar Disassembly systems are in place in the Enhanced Reconfiguration Building, where they await testing by the systemization team. These robots will disassemble the chemical agent-filled munitions without human intervention.



Sun Setting on Construction

With 97 percent of construction complete at PCAPP, workers are checking smaller tasks off their list, such as installing stands for instrument tubing on the Brine Reduction System.

NEXT 90 DAYS AT ACWA

Blue Grass: Systemization of the Laboratory will get under way this fall, as well as more equipment installation, including the Nitrogen Generation System. The Munitions Washout Station will undergo test readiness review and factory acceptance testing in Pasco, Wash.

Pueblo: The classrooms in the new plant operations training facility, located a few miles west of the Pueblo Chemical Depot at the Airport Industrial Park will be available for use in November. The Bechtel Pueblo Team will begin planning for the next phase of the project - operations.

www.pmacwa.army.mil

