



U.S. Army Element, Assembled
Chemical Weapons Alternatives

ACWA QUARTERLY BRIEF

A Partnership for Safe Chemical Weapons Destruction

June 2011



MESSAGE FROM THE ACTING PROGRAM MANAGER

On June 14, the Under Secretary of Defense for Acquisition, Technology and Logistics certified the Assembled Chemical Weapons Alternatives (ACWA) program to Congress under the Nunn-McCurdy Act. This certification is the result of a nearly six-month program review to determine the factors that led to the Nunn-McCurdy cost breach reported to Congress in December.



The Under Secretary has subsequently directed us to proceed with the program without significant changes to our destruction technology - neutralization followed by biotreatment in Colorado and neutralization followed by supercritical water oxidation in Kentucky. We will proceed with the understanding that if we encounter difficulties with the on-site treatment of hydrolysate, we will pursue off-site treatment and disposal. Additionally, in Kentucky, we will consider the use of Explosive Destruction Technology (EDT) to process problematic mustard munitions, the scope of which is being determined by the recently conducted X-ray campaign at Blue Grass.

As we move forward, we will do so with a more realistic cost and schedule estimate that incorporates sufficient risk factors and mitigation strategies to better account for the unique and technically complex nature of the facilities we are building. We are in the process of establishing a new Acquisition Program Baseline which we expect to reflect a life cycle program cost of approximately \$10.6B. We will continue to evaluate options to reduce costs and improve overall schedule, to include expediting the use of EDT at both sites.

We have a number of tasks to complete as follow-on to this review, but every one of them will make this program better. You can expect to receive additional information in the months to come, all of it leading more surely to the accomplishment of our critical national imperative - the safe and environmentally compliant destruction of the Colorado and Kentucky chemical stockpiles.

With appreciation and great respect for everything all of you do every day to make ACWA successful,

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

PUEBLO CHEMICAL AGENT-DESTRUCTION PILOT PLANT (PCAPP) UPDATES

Leadership Update: The Pueblo Chemical Agent-Destruction Pilot Plant team welcomed new leadership this spring. Bruce Huenefeld, who most recently served as a supervisory engineer at Rocky Mountain Arsenal, Colo., will officially be on board as the Pueblo site project manager. He joins Doug Omichinski, who was recently promoted to the position of Bechtel Pueblo Team project manager, and Lt. Col. Timothy Greenhaw, who assumed command of the U.S. Army Pueblo Chemical Depot on June 20.



Test Equipment Arrives at Pueblo

A shipment of mock munitions known as ACWA Test Equipment, or ATE, is unloaded at the U.S. Army Pueblo Chemical Depot. The ATE will be stored in igloos until they are ready to be used for testing the equipment and processes at the Pueblo facility.

Construction: The Pueblo team officially has gone out of the concrete business, completing its final major concrete placement in the Biotreatment Area in March. More equipment was installed in the last quarter, including Air Handling Units that will supply heat and air conditioning, as well as the 33-ton and eight-story evaporator for the Brine Reduction System, which will recover water for reuse in the plant.

Systemization: While finishing touches continue for the construction effort, the systemization stage, which involves all activities required to ensure the plant is ready to begin chemical weapons destruction operations, is moving full steam ahead. At Pueblo, 35 of about 300 mechanical and electrical systems have been successfully turned over to the start-up group. Additionally, in June, the shipment of more than 27,000 mock munitions from the Desert Chemical Depot in Utah to the Pueblo Chemical Depot was completed in coordination with the U.S. Department of Transportation, and the transportation departments from Utah, Wyoming, and Colorado, two Army depots, the ACWA program, the U.S. Army's Chemical Materials Agency, emergency preparedness agencies and several private contractors. The test equipment does not contain explosives or chemical agent and will be used during systemization to ensure the facility operates safely and efficiently prior to the introduction of live ammunition.



Senate Staffers Check Out the Agent Processing Building

Sen. Michael Bennet (D-CO) staff members, from left, Becca Montgomery, Sarah Hughes and Michelle Randall-Garcia received updates regarding pilot plant progress from Mark Hunter, lead civil/structural engineer for the Bechtel Pueblo Team, during their recent site tour.



BLUE GRASS CHEMICAL AGENT-DESTRUCTION PILOT PLANT (BGCAPP) UPDATES

Leadership Update: Site Project Manager Jeff Brubaker has been joined by yet another chemical demilitarization veteran. Tom McKinney, who was Bechtel operations manager at the Aberdeen Chemical Agent Disposal Facility in Maryland, arrived in April to serve as the Bechtel Parsons Blue Grass project manager, replacing Mark Seely. From 2004 to 2007, McKinney was the Operations Manager for Bechtel's Defense and Space program, providing oversight to Bechtel's teams working at Aberdeen, as well as the Pueblo and Blue Grass chemical weapons destruction projects.

Construction: The Blue Grass team spent the spring checking numerous actions off its list and as a result, construction stands at more than 34 percent complete. The first elevated, or second-level, concrete was placed on the Munitions Demilitarization Building (MDB), where most of the chemical weapons destruction process will occur. In addition to concrete, structural steel continues to expand the MDB, as it begins to be enclosed with wall panels. Interior work continues in the Control and Support and Utility Buildings, with workers installing wiring, piping, interior walls and climate control systems. Supercritical Water Oxidation system supply tanks were delivered, and are in storage awaiting their installation, while crews recently completed the Supercritical Water Oxidation Processing Building foundation, which will house all equipment to carry out the plant's secondary treatment process.

Systemization: In systemization news, the Fire Water Pump House was the first building declared operational in May. During the remainder of the construction phase, the tanks and pump house will provide the site with fire-suppression water. During chemical agent destruction operations, it will provide water for use during processing operations, as well as fire-suppression water to the pilot plant.



Vertical Construction Continues at Blue Grass

Workers install structural steel on the Munitions Demilitarization Building. Much of the construction work at the site is performed at elevation, so workers are trained on how to work safely and operate the necessary equipment to get the job done.



Out and About at Blue Grass

Regina Crawford, field representative for Sen. Mitch McConnell (R-KY), right, toured the Blue Grass construction site with project managers this spring.

NEXT 90 DAYS AT ACWA

National Research Council Safety Report: ACWA will be reviewing the National Research Council's recent report, *Assessment of Approaches for Using Process Safety Metrics at the Blue Grass and Pueblo Chemical Agent-Destruction Pilot Plants*, which outlines recommendations for enhancing safety processes during systemization and chemical weapons destruction operations at both ACWA chemical weapons destruction facilities. The findings will be examined to determine how best to integrate them into operating procedures and further ensure both facilities operate as safely as possible.

Nunn-McCurdy Follow-up: ACWA will work with Defense Department officials to implement activities to restructure the program in accordance with directions resulting from the Nunn-McCurdy certification process. This will include submitting a new Acquisition Program Baseline for approval that reflects a restructured ACWA program, to include realistic cost and schedule estimates. These estimates will incorporate sufficient risk factors and mitigation strategies to account for unknowns likely to be encountered because of the unique and complex nature of the Pueblo and Blue Grass facilities.

Blue Grass X-ray Assessment: In coordination with Blue Grass Army Depot, Blue Grass Chemical Activity and the Project Manager Non-Stockpile Chemical Materiel, an assessment that analyzed a sample of mustard projectiles in the Kentucky chemical weapons stockpile to measure the presence of solidified chemical agent, or "heels," was completed in May. Analysis of data is under way and assessment results are expected to be released in the fourth quarter of FY 2011.



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