



U.S. Army Element, Assembled
Chemical Weapons Alternatives

ACWA QUARTERLY BRIEF

A Partnership for Safe Chemical Weapons Destruction

December 2011



MESSAGE FROM THE ACTING PROGRAM MANAGER

Reflecting on this past year gives me great pride, as I watched remarkable progress in how this program is persevering towards its end goal.



Acting Program Manager Conrad Whyne, left, led a delegation of ACWA program representatives, including Risk Management Director Jim Richmond, far right, at the December 2011 Colorado Chemical Demilitarization Citizens' Advisory Commission meeting.

I was able to travel to both Blue Grass and Pueblo several times this year and on each occasion witnessed firsthand the hard work and dedication of our teams on the ground. Their ability to maintain construction momentum while ramping up systemization activities has ensured that we are progressing as expected toward our upcoming milestones. These visits also allowed me to get to know many of the local stakeholders who follow and support the projects in each community.

One of the key issues I discussed with stakeholders this year was consideration and use of explosive destruction technologies (EDT). At Blue Grass, the recently released munition x-ray assessment report showed that removal of mustard agent from projectiles would be difficult in the current BGCAPP design. As such, the Blue Grass team is currently evaluating the feasibility of utilizing EDT to destroy this segment of the stockpile. Stakeholder involvement and public feedback on this topic will continue to be key part of the evaluation process. At Pueblo, the team is moving in a similar direction and will be completing a formal environmental assessment in the spring of 2012 to assess the use of EDT.

EDT is a great example of how together, we will continue to push this program forward and resolve unexpected challenges. Thank you for your support in making 2011 a success, and best wishes for a happy, healthy and productive new year.

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

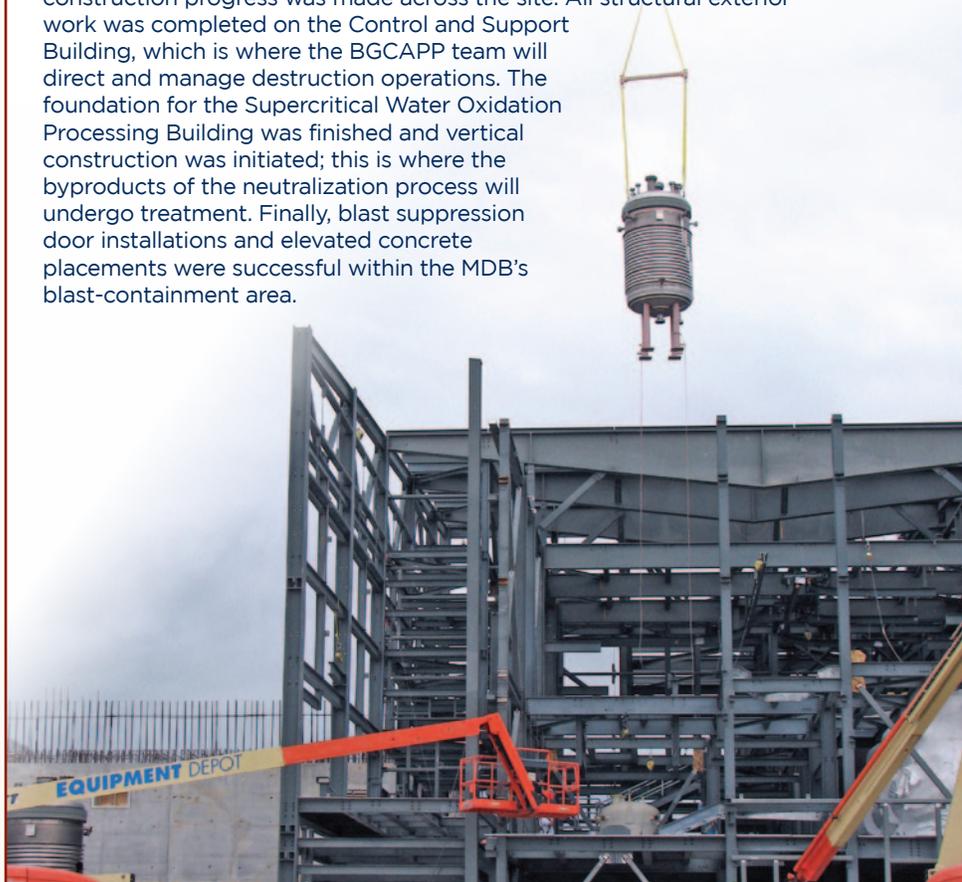
BLUE GRASS CHEMICAL AGENT-DESTRUCTION PILOT PLANT (BGCAPP) UPDATE

Blue Grass Earns National Safety Award. After a detailed and lengthy certification process, the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) project received Voluntary Protection Program (VPP) Star Status certification from the U.S. Department of Labor's Occupational Safety & Health Administration—one of its highest recognitions for a worker safety program last month. "Safety at BGCAPP is not just something to comply with; it is how we work day-in and day-out," said Site Project Manager Jeff Brubaker. "This certification validates our approaches and is testimony to discipline and high standards we strive to achieve in all we do."



Year at a Glance. Change was afoot all over the BGCAPP construction site this year, both indoors and out. The most significant event was the arrival of the reactors that will drive the neutralization process. Housed in the pilot plant's Munitions Demilitarization Building (MDB), the two Agent Neutralization Reactors and three Energetics Neutralization Reactors will use water and sodium hydroxide to destroy chemical agent and energetics.

In addition to other deliveries, including large boilers for the Utility Building and equipment for the facility's cascading ventilation system, significant construction progress was made across the site. All structural exterior work was completed on the Control and Support Building, which is where the BGCAPP team will direct and manage destruction operations. The foundation for the Supercritical Water Oxidation Processing Building was finished and vertical construction was initiated; this is where the byproducts of the neutralization process will undergo treatment. Finally, blast suppression door installations and elevated concrete placements were successful within the MDB's blast-containment area.



Easy Does It

Above, during a two-day process, workers used cranes, ropes and other rigs to guide one of BGCAPP's two Agent Neutralization Reactors into place this fall.



PUEBLO CHEMICAL AGENT-DESTRUCTION PILOT PLANT (PCAPP) UPDATE

Pueblo Flips the Switch. Permanent power boosted the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) site this fall, when the team brought the facility’s 13.2 kilovolt switchgear on line. Yet another example of continued progress, this action enables the Pueblo team to begin to energize the rest of the plant. The switchgear will slowly but surely extend electricity across each major power distribution center, or building, across the site.

Year at a Glance. This year, a tremendous amount of progress was made indoors at PCAPP, as the team continued to fill buildings with electrical wiring, HVAC, and piping, as well as various types of equipment, such as conveyors, air monitors, and computer consoles for the Control and Support Building. Outdoors, the most evident changes were in the Biotreatment Area of the facility. The tallest structure on site - the Evaporator for the Brine Reduction System - as well as 16 Immobilized Cell Bioreactors, were installed in the Biotreatment Area, where the byproducts of the neutralization process will undergo treatment.

Systemization efforts continued to march along in a parallel fashion with construction, as at year-end, a total of 42, or 45 percent, of the systems at the site are expected to be in the hands of the PCAPP start-up group. In concert with this technical transition of equipment from construction teams, the start-up group is focused on developing and issuing procedures to provide protective measures that will guide workers when dealing with hazardous activities. With construction expected to wrap up later in 2012, systemization activities will continue to ramp-up in preparation for the Operational Readiness Review required prior to pilot testing and destruction operations.



Good Day Sunshine
The Colorado sunrise shows off the recent progress in the Biotreatment Area, including the Evaporator and Crystallizer included in the facility’s Brine Reduction System, which will recycle up to 85 percent of the water used in the agent neutralization process back through the system for reuse.

NEXT 90 DAYS AT ACWA

Blue Grass: The team will begin receiving structural steel for the external frame of the Supercritical Water Oxidation Processing Building and continue key concrete placements for the Munitions Demilitarization Building’s blast area.

Pueblo: The facility’s essential power system will be fully commissioned and staff members are expected to move into the Laboratory, Medical Clinic, Multipurpose and Control and Support Buildings. The team anticipates turning over to the start-up group more than 80 percent of the plant’s subsystems.