

Monthly Status Briefing

November 2013



Blue Grass Chemical Agent-Destruction Pilot Plant



Program Executive Office
Assembled Chemical Weapons Alternatives



BGCAPP

Blue Grass Chemical
Agent-Destruction Pilot Plant

www.peoacwa.army.mil



A PARTNERSHIP FOR SAFE CHEMICAL WEAPONS DESTRUCTION

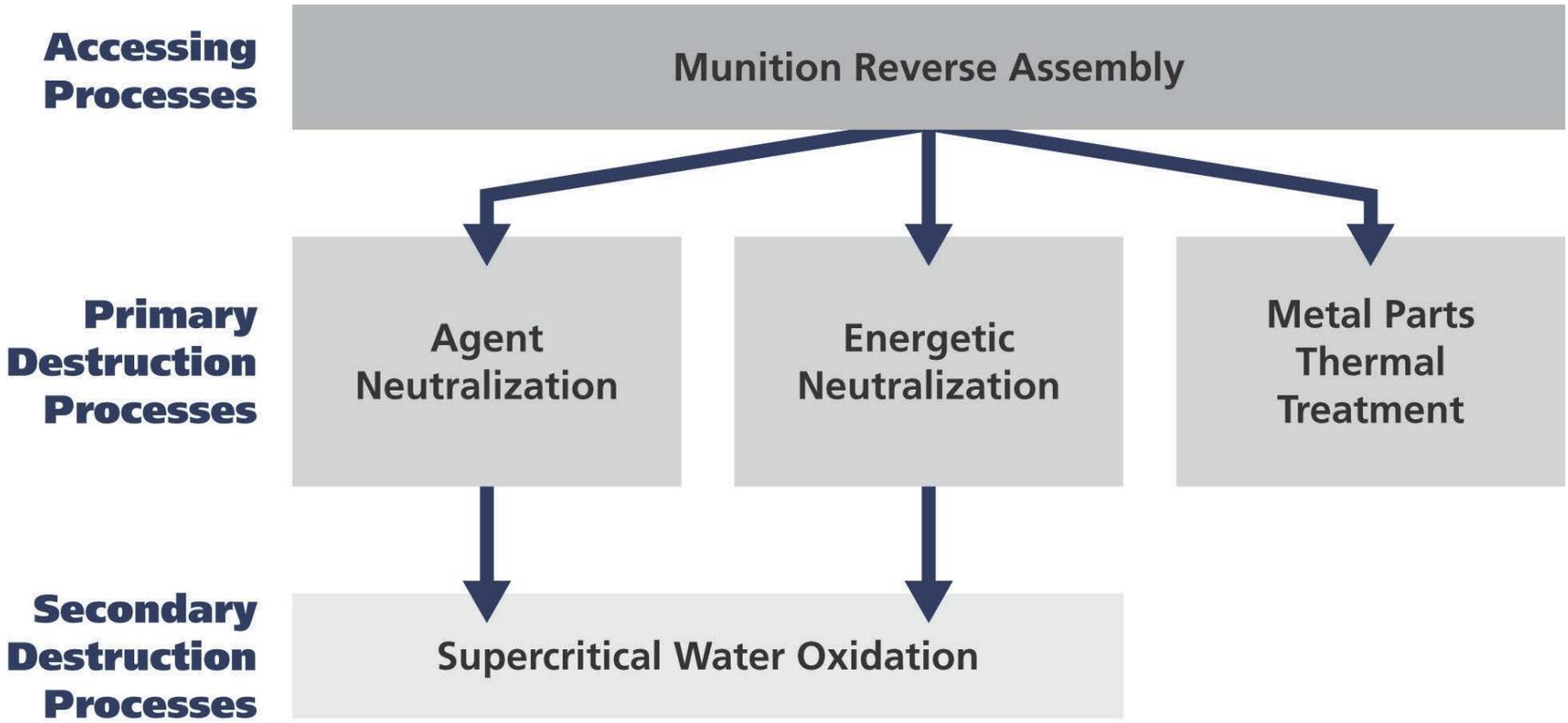
Project Background

- The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will safely destroy 523 tons of chemical agent in rockets and artillery projectiles stored at the Blue Grass Army Depot in Richmond, Ky.
- The technology selected by the Department of Defense to destroy the Blue Grass chemical weapons stockpile is neutralization followed by supercritical water oxidation (SCWO).
- The Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) Program, headquartered at Aberdeen Proving Ground, Md., is responsible for managing all aspects of the safe and environmentally sound destruction of the chemical weapons stockpiles in both Kentucky and Colorado.
- The Bechtel Parsons Blue Grass Team, a joint venture of Bechtel National, Inc., and Parsons Government Services Inc., along with teaming partners URS Corporation, Battelle, General Atomics and GP Strategies Corporation, is the systems contractor selected to design, build, systemize, pilot test, operate and close BGCAPP.

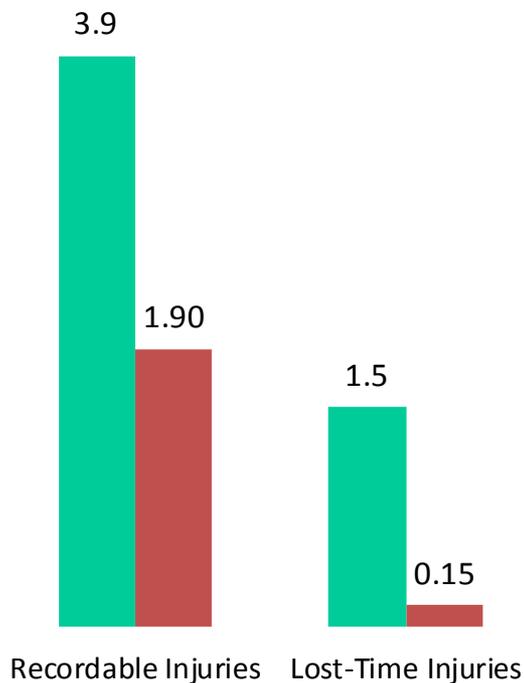


Destruction Technology

Neutralization followed by supercritical water oxidation will be used to destroy the Kentucky stockpile.

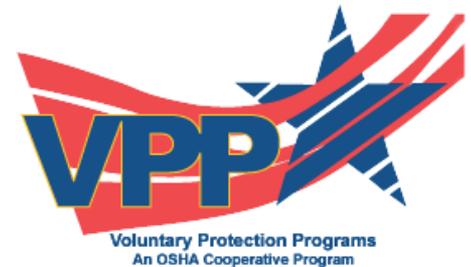


Safety



■ Construction Industry
■ Bechtel Parsons
(12-month rolling rate)
Accidents per 200,000 job hours

- Occupational Safety and Health Administration Voluntary Protection Program Star Status site
- Lost-time injury rate is **90 percent lower** and recordable injury rate is **51 percent lower** than industry average
- As of October 31, 2013, the project has completed approximately 40,000 hours and three days without a lost-time accident



Continued Safety Focus

- **Safety remains a core value of the project workforce**
- **Workforce committed to a *Brother's Keeper* mindset**
 - Culture of mentoring one another, remaining vigilant and respectfully challenging unsafe workplace behaviors
- **Management and employees focused on goal of *Zero Accidents*:**
 - Communicating proper construction techniques, need for continuous improvement and incorporating lessons learned
 - Communicating importance of pre-planning and discussing daily work activities; identifying potential safety hazards before work begins



Current Project Staffing

- **Total project employment—1,354**
- **Richmond, Ky.—1,348**
 - Nonmanual—637
 - Craft—711
 - Local hires—59 percent
- **Other locations—6**
 - San Diego, Calif.
 - Columbus, Ohio
 - Reston, Va.



More than 700 locally hired craft workers are employed at the BGCAPP construction site.

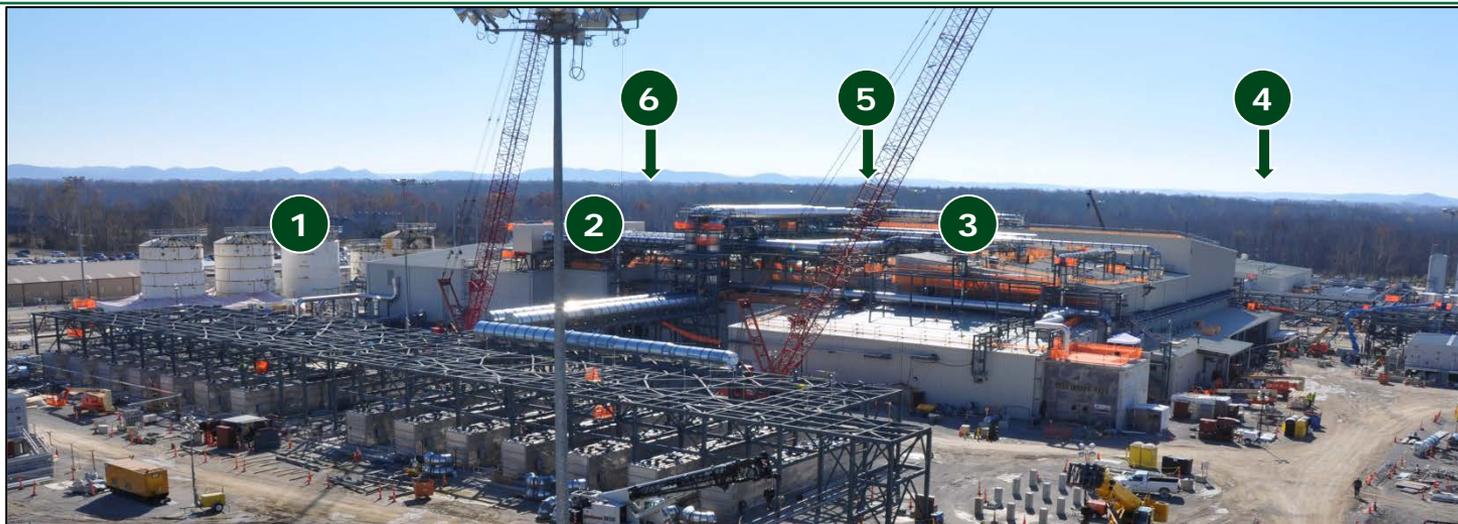
Economic Impact

- **Acquisitions to date**
 - \$118.7 million spent with Kentucky companies
 - \$68.4 million spent in Madison and surrounding counties
- **Payroll to date**
(includes nonmanual and craft)
 - \$498 million of local payroll paid



A November vendor forum helped local companies to learn more about BGCAPP procurement opportunities.

Work in Progress



1 Hydrolysate Storage Area

- Exterior tank painting preparation

2 Control and Support Building (CSB)

- Facility Control System electrical wiring
- Preparing for systemization team beneficial occupancy

3 Munitions Demilitarization Building (MDB)

- Reverse assembly equipment installation
- Heating, ventilation and air conditioning duct work, electrical, piping, mechanical systems
- MDB filter area support steel and stacks

4 Utility Building

- Exterior pipe rack support steel
- Interior electrical and piping systems
- Preparing for internal systems turnover to systemization phase

5 Supercritical Water Oxidation (SCWO) Process Building (not visible in photo)

- Mechanical equipment and lighting systems
- SCWO effluent process tank area foundation

6 Laboratory Building (not visible in photo)

- Systemization complete, personnel occupancy

Control and Support Building (CSB)



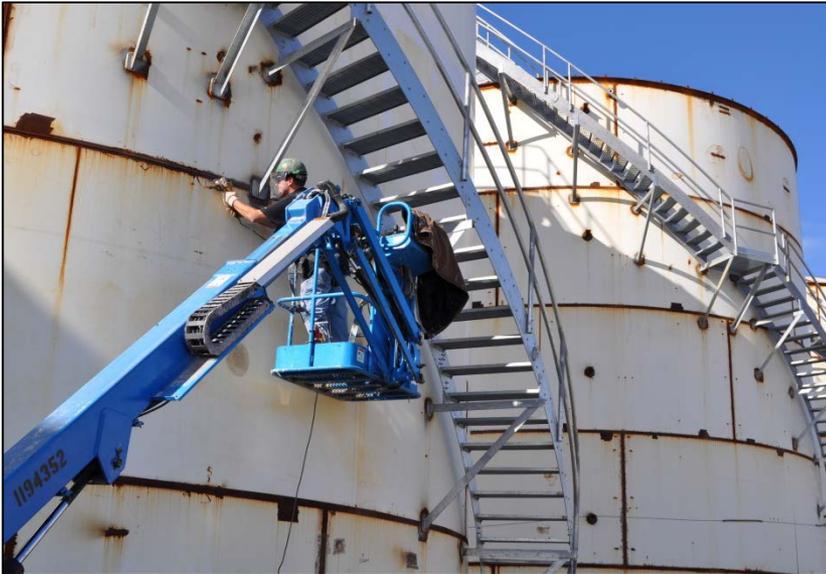
A drop panel ceiling and several control system monitors are installed inside the CSB control room (above left). A painter prepares CSB entry doors for final painting (above right). Once complete, the CSB will house the control room and the integrated control system used to operate the plant.

Munitions Demilitarization Building (MDB)



An iron worker welds components of the Rocket Shear Machine (above left). Pipefitters review design drawings inside the agent neutralization system room (above right). The MDB is where the chemical weapons will be disassembled, the explosives removed and the agent neutralized.

Supercritical Water Oxidation (SCWO) Process Building and Hydrolysate Storage Area (HSA)



A worker grinds the outside of an HSA tank (above left) to prepare for exterior coating applications. At the SCWO Process Building, pipefitters unpack a SCWO reactor unit (above right) before installation. During operations, agent and energetic hydrolysates, byproducts of the neutralization process, are emptied into HSA holding tanks once agent destruction is verified. The hydrolysate is transferred to the SCWO Process Building which houses the reactors where agent and energetic hydrolysates will be subjected to very high temperatures and pressures to destroy their organic content.

Utility Building (UB)



Systemization personnel inspect air compressor units (above left). An electrician installs conduit inside the boiler room (above right). Once complete, the Utility Building will house equipment to produce steam, compressed air, chilled water and hot water for operations.

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