



Blue Grass Chemical Agent-
Destruction Pilot Plant

Monthly Status Briefing

June 2012



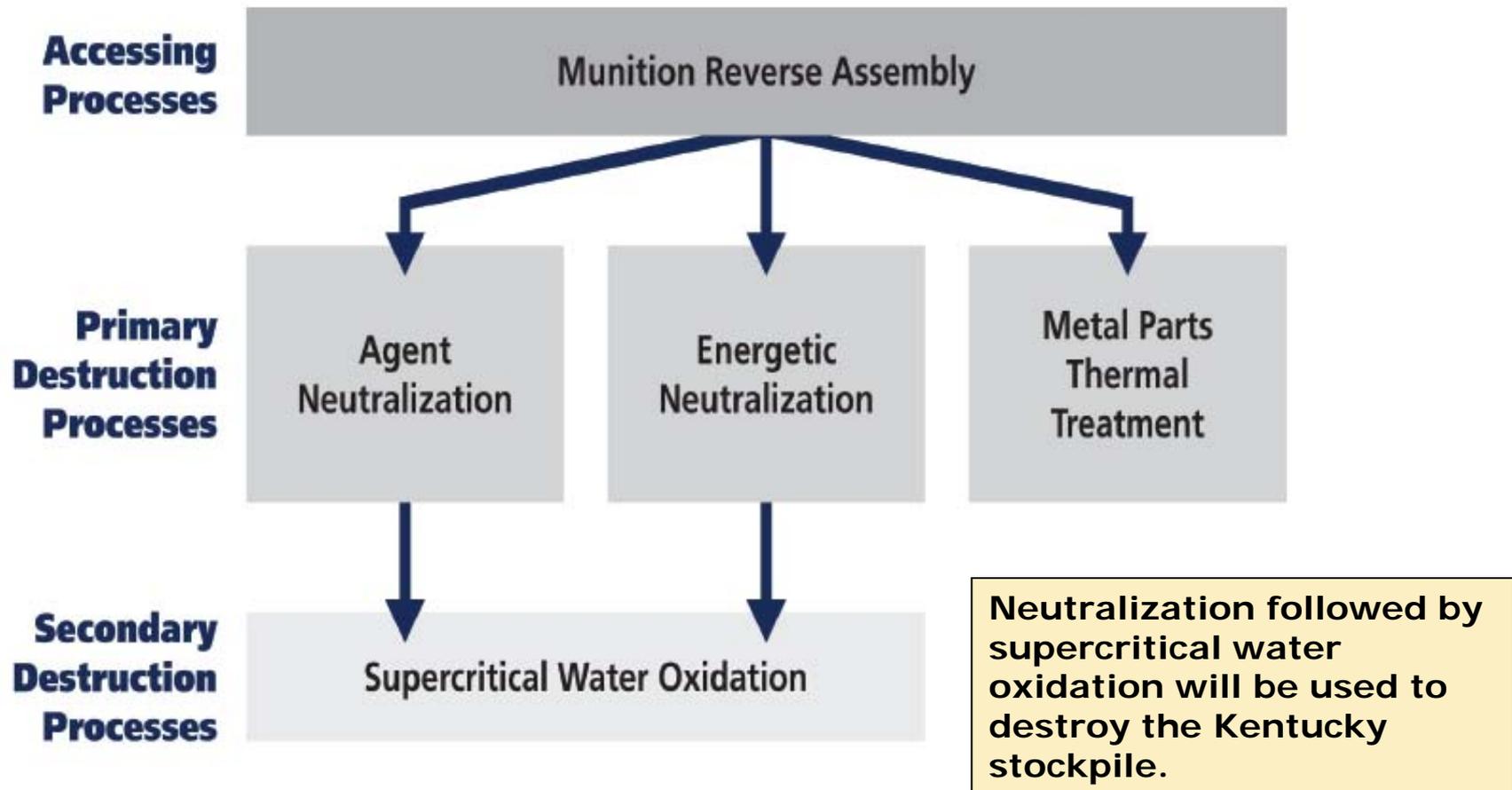
BGCAPP

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 Assembled Chemical Weapons Alternatives (ACWA) Program, headquartered at Aberdeen Proving Ground, Maryland, 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



Safety



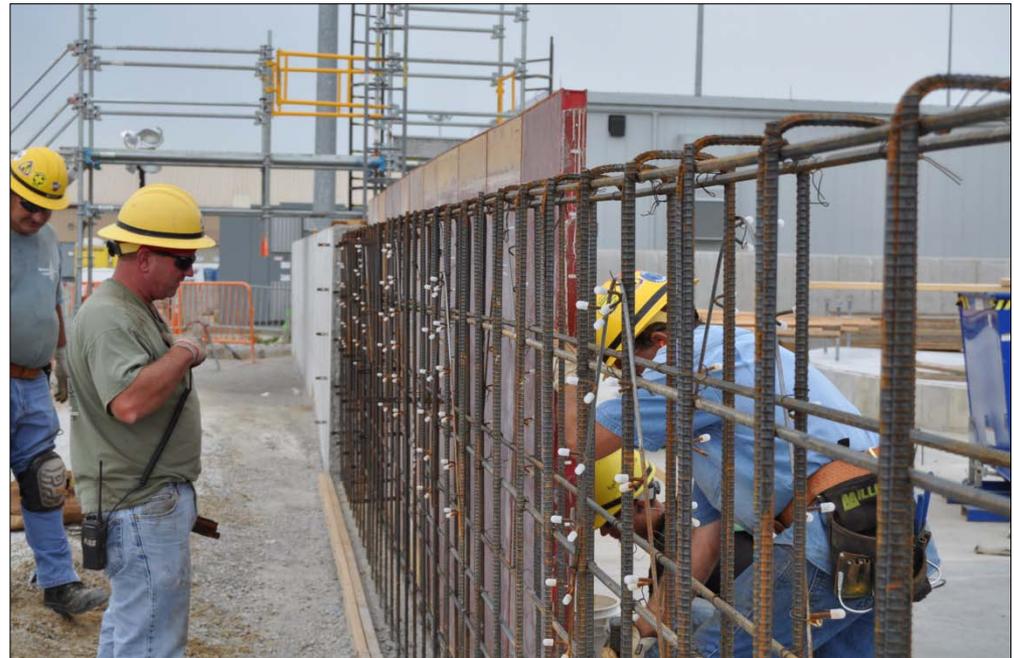
■ Construction Industry
■ Bechtel Parsons
(12-month rolling rate)
Accidents per 200,000 job hours

- Occupational Safety and Health Administration Voluntary Protection Program Star Status site
- Lost-time injury rate is **93 percent lower** and recordable injury rate **49 percent lower** than industry average
- As of May 31, 2012, the project has completed 155,666 hours and 45 days without a lost-time accident



Current Project Staffing

- **Total project employment—939**
- **Richmond, Ky.—863**
 - Nonmanual—454
 - Craft—409
 - Local hires—56 percent
- **Other locations—76**
 - Pasco, Wash.
 - San Diego, Calif.
 - Columbus, Ohio
 - Frederick, Md.



Blue Grass Chemical Agent-Destruction Pilot Plant craft workers install formwork to support a future concrete placement.

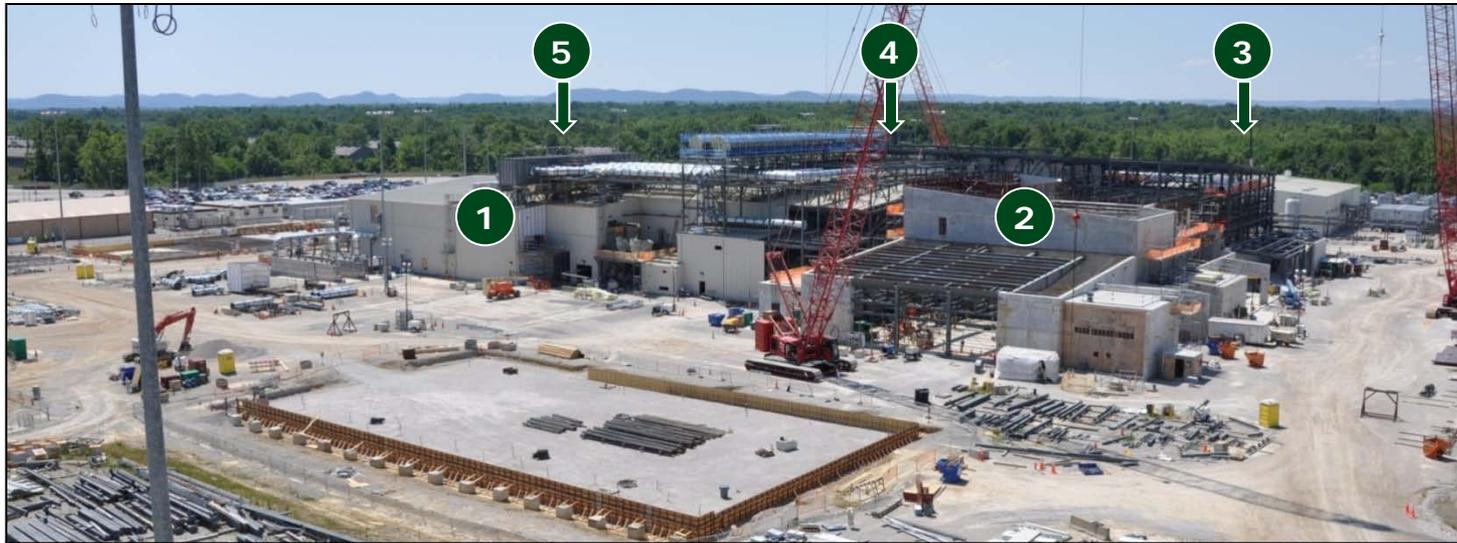
- **Acquisitions to date**

- \$83.5 million spent with Kentucky companies
- \$47.3 million spent in Madison and surrounding counties

- **Payroll to date** (includes nonmanual and craft)

- \$334 million of local payroll paid
- \$476 million more to be paid during the remainder of project

Construction Work in Progress



1 Control and Support Building (CSB)

- Electrical, piping and fire detection systems
- Heating, ventilation and air conditioning (HVAC)

2 Munitions Demilitarization Building (MDB)

- Concrete placements, structural steel, paneling
- Electrical, piping, mechanical systems
- HVAC systems and protective coatings
- MDB filter area foundations

3 Utility Building (not visible in photo)

- Exterior pipe rack support steel
- Concrete pads for exterior utilities
- Exterior evaporative water coolers
- Interior electrical and piping systems

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

- Structural steel, process tanks and equipment

5 Laboratory Building (not visible in photo)

- Exterior siding and interior floorings

Control and Support Building (CSB)



Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) craft workers use a crane to install a large section of cascading ventilation air ductwork (above left) atop the CSB roof. On the ground, a craft worker attaches ductwork to an exterior CSB heating, ventilation and air conditioning unit (above right). Once complete, the CSB will house the control room and integrated control system used to operate BGCAPP.

Munitions Demilitarization Building (MDB)



An exposed portion of the MDB reveals the structural steel and flooring platforms erected over and around the MDB's installed agent and energetics neutralization equipment (above left). Alongside the MDB, craft workers erect support steel and install piping (above right) that will carry utilities such as chilled water and steam to support plant operations. The MDB is where the chemical weapons will be disassembled, the explosives removed and the agent neutralized.

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



Blue Grass craft workers smooth and finish (above left) a recent HSA concrete foundation placement. Meanwhile at the SCWO Process Building, craft workers use a crane to lift structural steel for installation (above right). 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 the hydrolysate's organic content.

Utility Building (UB)



A Blue Grass Chemical Agent-Destruction Pilot Plant craft worker (insert above left) welds piping inside the UB (above left). Outside the UB, a set of large evaporative coolers have been installed (above right) that will help cool water to support plant operations. Once complete, the UB will house equipment to produce steam, compressed air, chilled water and hot water for operations.

Blue Grass Chemical Agent-Destruction Pilot Plant

