



Blue Grass Chemical Agent-
Destruction Pilot Plant

Monthly Status Briefing

October 2012



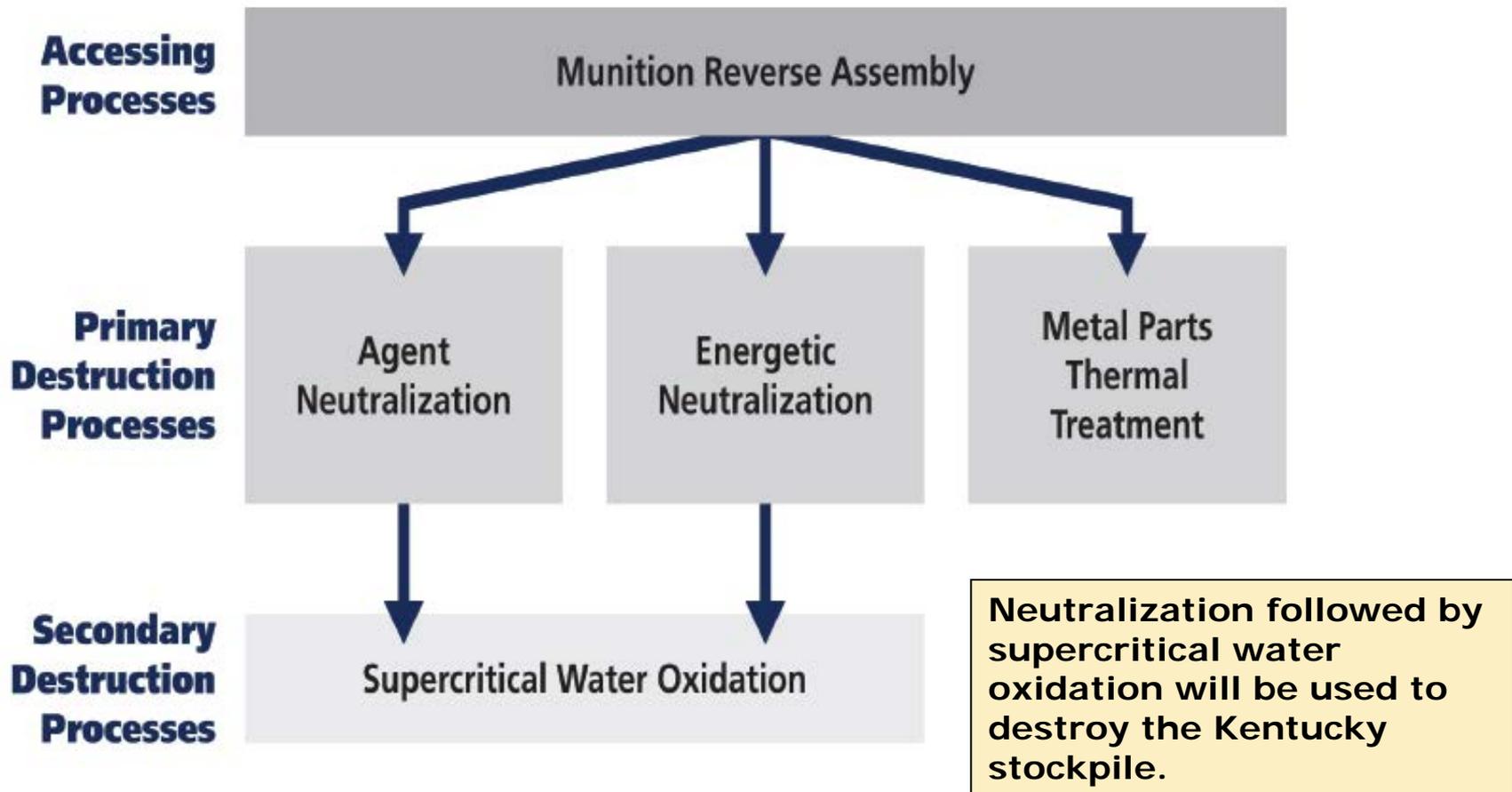
BGCAPP

Project Background

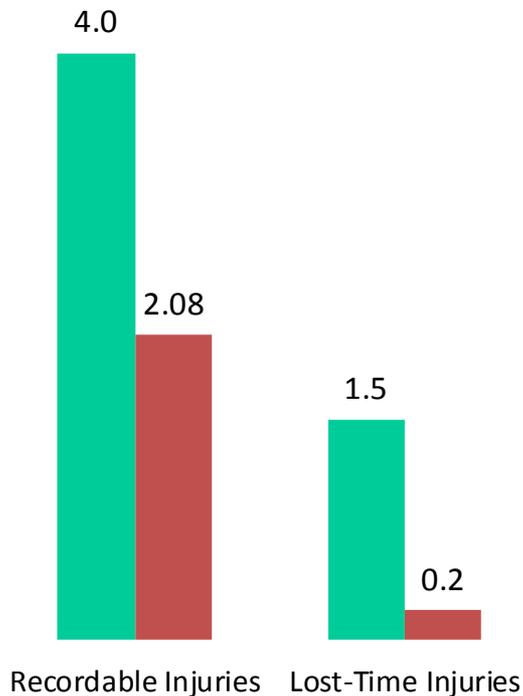
- The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will safely destroy 523 tons of chemical agent in rockets and artillery projectiles stored at the Blue Grass Army Depot in Richmond, Ky.
- The technology selected by the Department of Defense to destroy the Blue Grass chemical weapons stockpile is neutralization followed by supercritical water oxidation (SCWO).
- The Program Executive Office, Assembled Chemical Weapons Alternatives (PEO 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



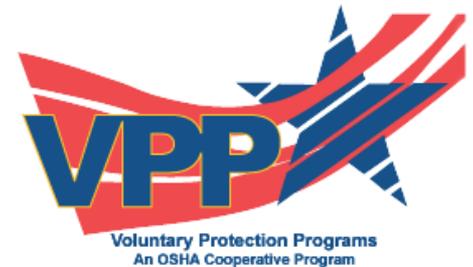
Safety



Recordable Injuries Lost-Time Injuries

■ 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 **87 percent lower** and recordable injury rate **48 percent lower** than industry average
- As of September 30, 2012, the project has completed 482,487 hours and 108 days without a lost-time accident

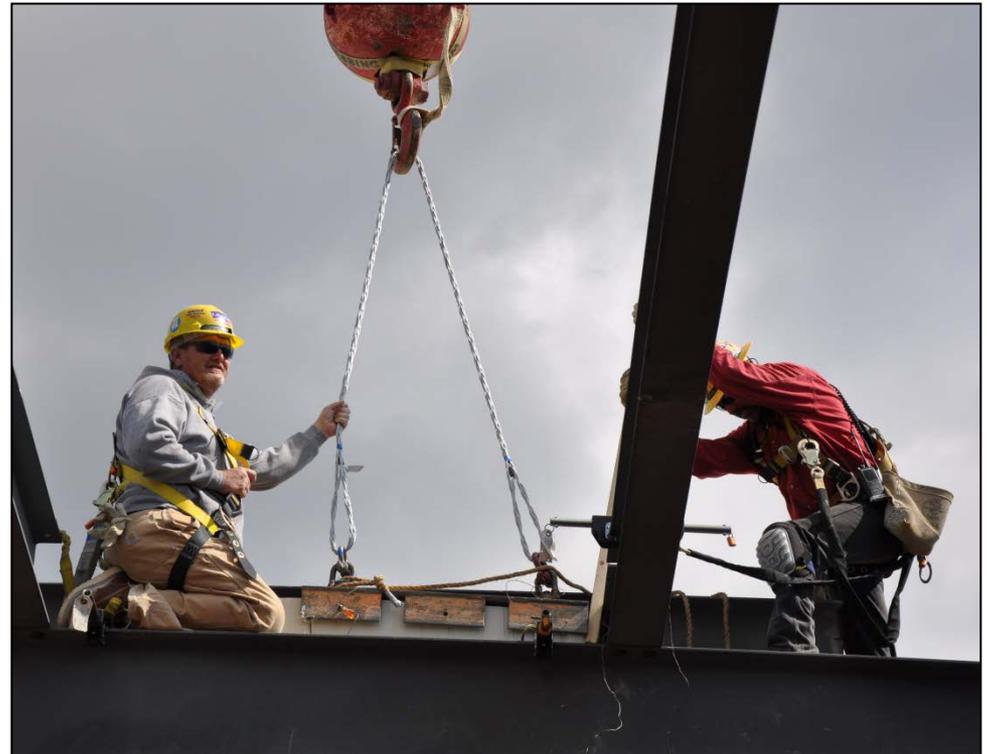


Continued Safety Focus

- **Safety remains a core value of the project workforce**
- **Management and employees focusing on goal of *Zero Accidents*:**
 - Communicating and re-emphasizing proper construction housekeeping, its relationship to safety excellence and need for continuous improvement
 - Communicating and re-emphasizing importance of pre-planning and discussing daily work activities; identifying potential safety hazards before work begins
 - Communicating and reviewing recent Occupational Safety & Health Administration recordable injuries and re-emphasizing employees' roles and responsibilities to follow work procedures and analyze for potential hazards before work begins

Current Project Staffing

- **Total project employment—1,026**
- **Richmond, Ky.—962**
 - Nonmanual—469
 - Craft—493
 - Local hires—59 percent
- **Other locations—64**
 - Pasco, Wash.
 - San Diego, Calif.
 - Columbus, Ohio
 - Frederick, Md.



Craft workers install roof panels at the Munitions Demilitarization Building.

Economic Impact

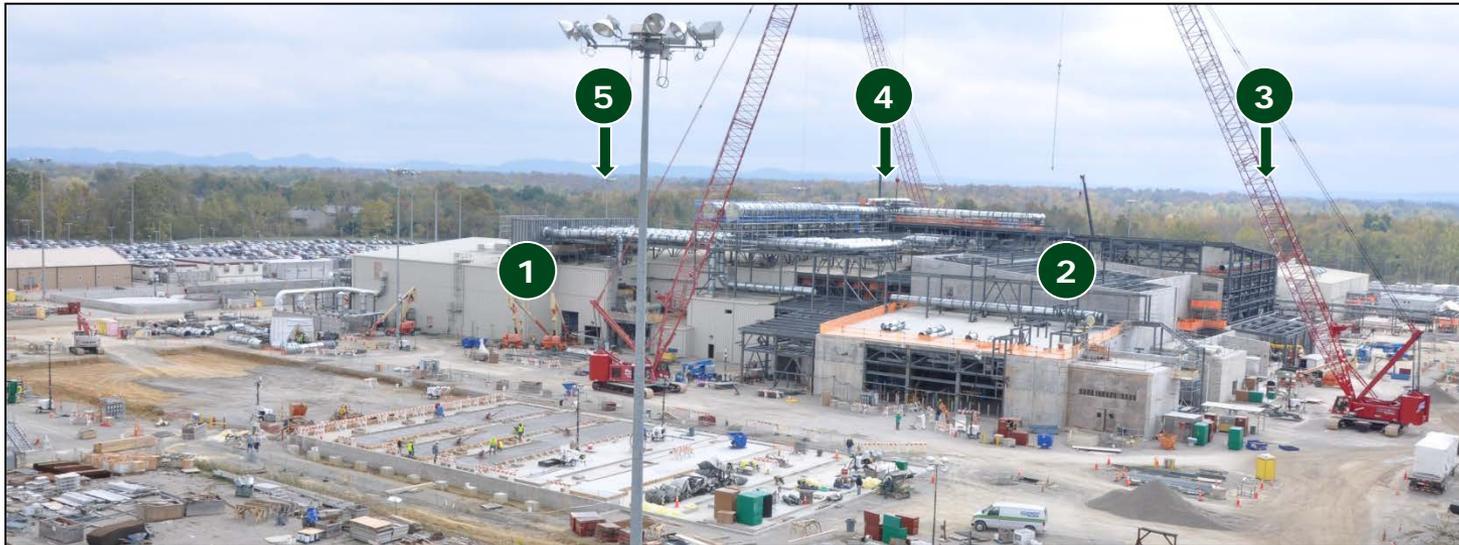
- **Acquisitions to date**

- \$96.9 million spent with Kentucky companies
- \$57.8 million spent in Madison and surrounding counties

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

- \$366 million of local payroll paid
- \$444 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)
 - Facility control system cabinets and infrastructure

- 2 Munitions Demilitarization Building (MDB)**
- Structural steel, paneling, protective coatings
 - HVAC, electrical, piping, mechanical systems
 - MDB filter area foundations

- 3 Utility Building**
- Exterior pipe rack support steel
 - Interior electrical and piping systems
 - Nitrogen generation plant equipment

- 4 Supercritical Water Oxidation (SCWO) Process Building** (not visible in photo)
- Structural steel and exterior siding

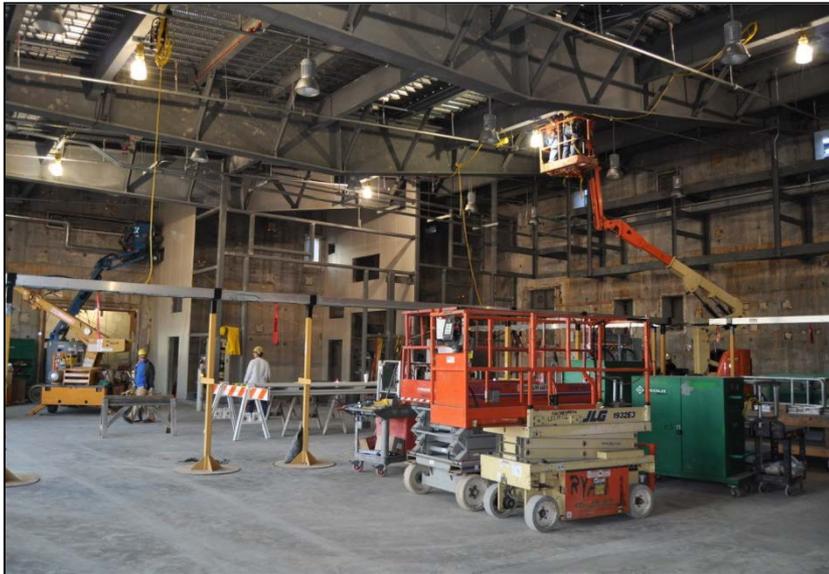
- 5 Laboratory Building** (not visible in photo)
- Final construction punchlist activities
 - Beginning early systemization activities

Control and Support Building (CSB)



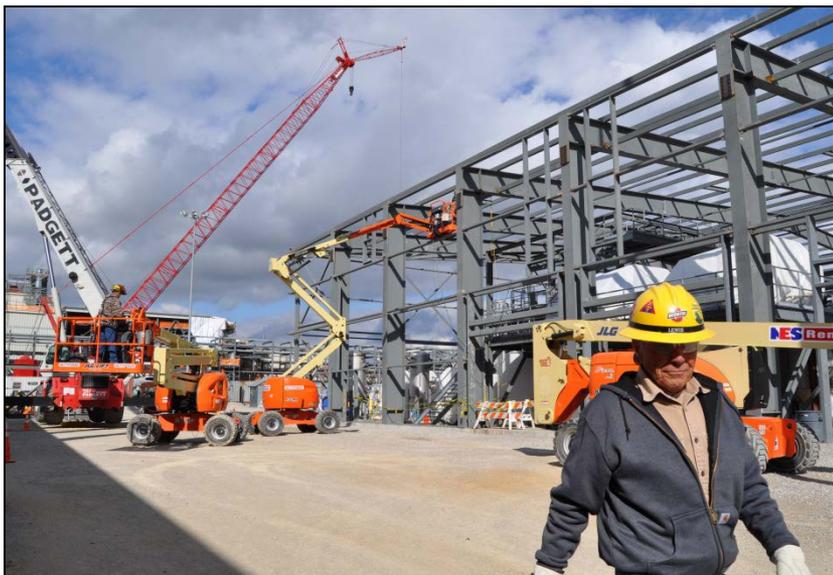
A craft workers installs wiring inside an electrical transformer (above left) within the CSB. Outside the CSB, craft workers install heating, ventilation and air conditioning ductwork (above right) atop the roof. Once complete, the CSB will house the control room and the integrated control system used to operate the plant.

Munitions Demilitarization Building (MDB)



BGCAPP craft workers install electrical systems (above left) inside the MDB unpack area. During plant operations, the unpack area is where chemical weapons will be received and unpacked before the automated destruction process begins. A craft worker takes measurements (above right) before installing piping infrastructure inside the MDB agent neutralization system room. The MDB is where the chemical weapons will be disassembled, the explosives removed and the agent neutralized.

Supercritical Water Oxidation (SCWO) Process Building and Utility Power Centers (UPCs)



Craft workers continue installing the final pieces of exterior structural steel (above left) at the SCWO Process Building. Elsewhere at the BGCAPP site, craft workers assemble formwork (above right) for upcoming concrete pier placements to support a future UPC installation. The SCWO Process Building will house the reactors where agent and energetic hydrolysates, byproducts of the neutralization process, will be subjected to very high temperatures and pressures to destroy the hydrolysates' organic content. During operations, the UPCs will distribute electrical power to BGCAPP facilities.

Utility Building (UB)



Adjacent to the UB, craft workers unload equipment (above left) for later installation atop the recently completed nitrogen generation plant concrete foundation. Inside the UB, craft workers install air compressor heating, ventilation and air conditioning ductwork (above right). The nitrogen generation plant will supply nitrogen, an inert and non-flammable gas, during plant operations to maintain a combustion-free environment. 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

