



Blue Grass Chemical Agent-
Destruction Pilot Plant

Monthly Status Briefing

September 2011



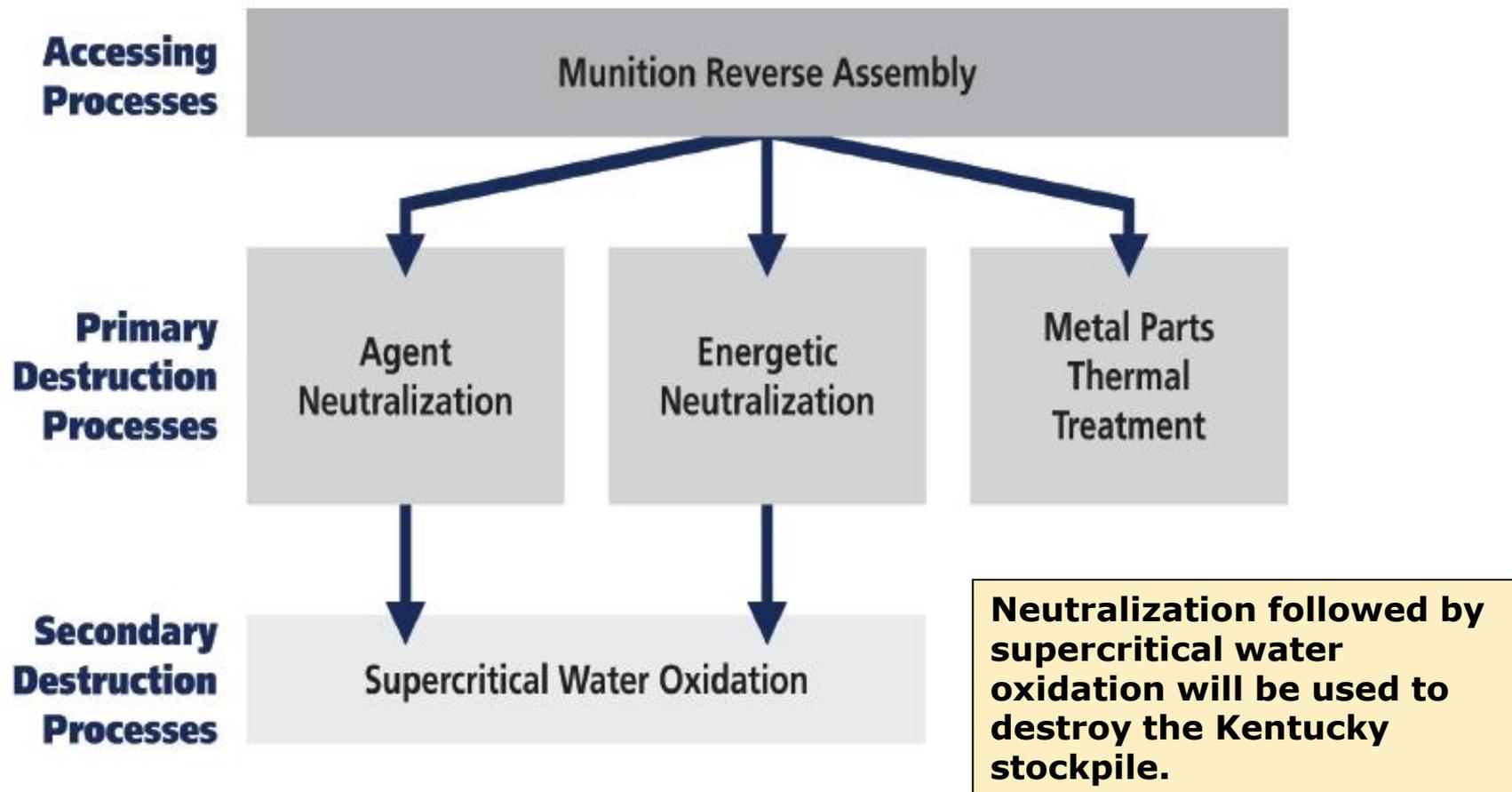
BGCAPP

Project Background

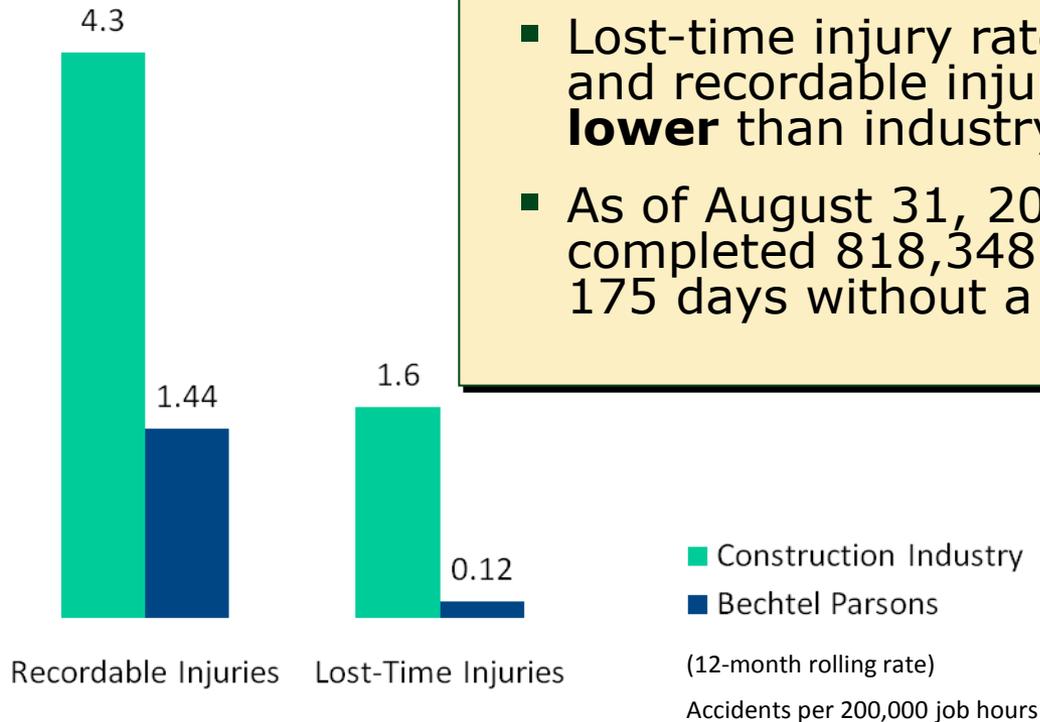
- The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will safely destroy 523 tons of chemical agent in rockets and artillery projectiles stored at the Blue Grass Army Depot in Richmond, Ky.
- The technology selected by the Department of Defense to destroy the Blue Grass chemical weapons stockpile 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 Infrastructure and Technology Group, along with teaming partners URS Corporation, Battelle Memorial Institute, General Atomics and General Physics, is the systems contractor selected to design, build, systemize, pilot test, operate and close the BGCAPP.



Destruction Technology



Safety



- Continued progress toward OSHA Voluntary Protection Program Star Status
- Lost-time injury rate **93 percent lower** and recordable injury rate **67 percent lower** than industry average
- As of August 31, 2011, the project has completed 818,348 hours and 175 days without a lost-time accident



Current Project Staffing

- **Total project employment—888**
- **Richmond, Ky.—741**
 - Nonmanual—388
 - Craft—353
 - Local hires—58 percent
- **Other locations—147**
 - Pasco, WA
 - San Diego, CA
 - Columbus, OH
 - Frederick, MD



More than half of the BGCAPP project workforce are hired from the local area.

Economic Impact

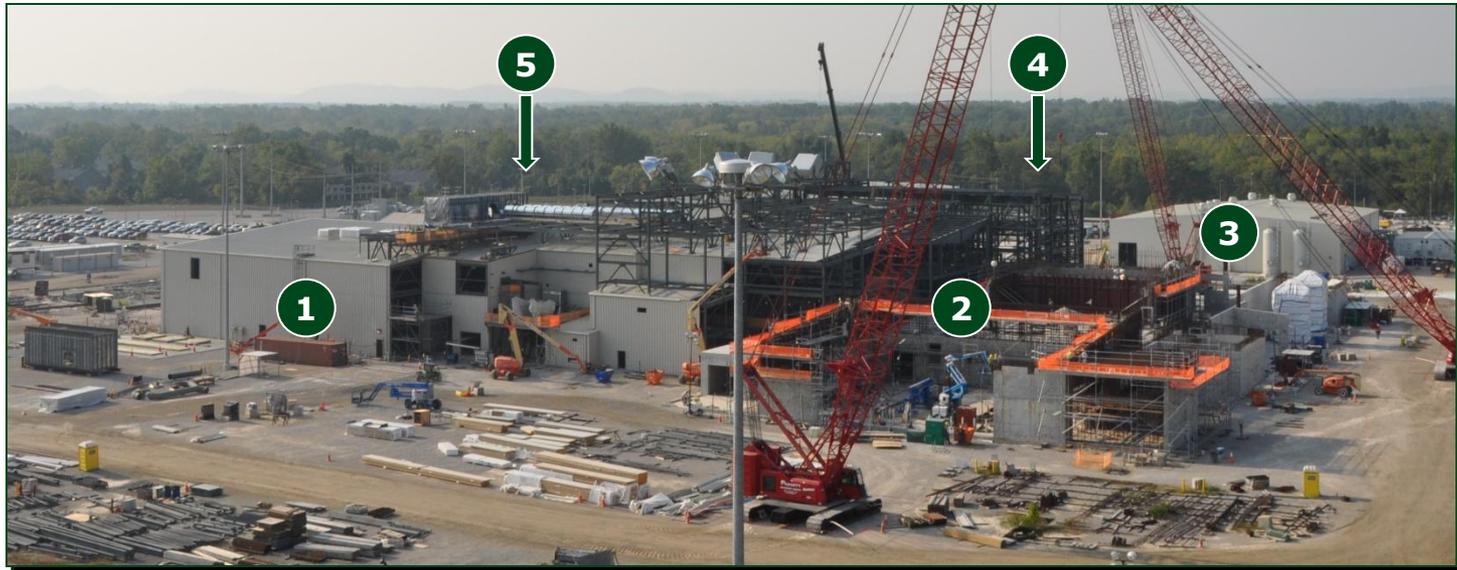
■ Acquisitions to date

- \$74.8 million spent with Kentucky companies
- \$44.6 million spent in Madison and surrounding counties

■ Payroll to date

- \$201 million of local payroll paid
- \$426 million more to be paid during the remainder of project

Construction Work in Progress



1 Control and Support Building (CSB)

- Metal wall studs and sheet rock
- Electrical, piping and fire detection systems
- Heating, ventilation and air conditioning (HVAC)

3 Utility Building

- Electrical, piping and HVAC systems
- Exterior tanks

2 Munitions Demilitarization Building (MDB)

- First and second lift concrete placements
- Structural steel and wall paneling
- Electrical and piping systems
- Vessels and tanks

4 Supercritical Water Oxidation (SCWO) Building

(not visible in photo)

- Pipe rack steel and equipment tanks

5 Laboratory Building

(not visible in photo)

- Concrete foundation placements

Control and Support Building (CSB)



BGCAPP craft workers (above left) safely fasten sheetrock to metal wall studs inside the CSB. Outside the CSB, craft workers (above right) erect support steel for external piping systems. Once complete, the CSB will house the control room and integrated control system used to operate BGCAPP.

Munitions Demilitarization Building (MDB)



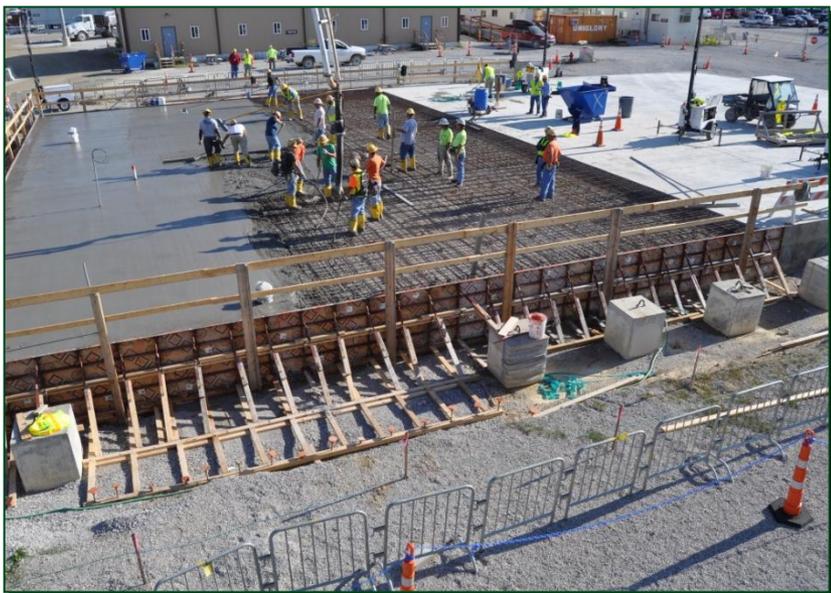
BGCAPP construction craft workers (above left) continue erecting structural steel and preparing for more elevated concrete placements. Meanwhile, at a fabrication shop in Pasco, Wash., assembly of the Rocket Cutter (above, right, top) and Shear (above, right, bottom) machines continued. This Blue Grass Specific Equipment is designed to separate rocket motors from the portions containing agent and cut rockets into pieces and drain the agent. The MDB is where the chemical weapons will be disassembled, explosives removed and the agent neutralized.

Supercritical Water Oxidation (SCWO) Building



A SCWO emergency relief tank (above) has been placed atop the building's foundation. The tank is specially designed for a safe and controlled release of liquid or gas pressure if ever needed during plant operations. The SCWO 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.

Laboratory Building



At the Laboratory Building, BGCAPP team members (above left) completed the building's final concrete foundation placement. Meanwhile, at a fabrication facility in Elkhart, Ind., workers have been fabricating and assembling the Laboratory Building's 20 modular components (above right) which will later be set atop the completed foundation. The Laboratory will handle and analyze low concentrations of chemical agent when BGCAPP operations begin.

Utility Building (UB)



Inside the fully enclosed UB (above left), BGCAPP craft workers continue installing piping and equipment systems. Outside the UB, two large compressed air tanks (above right) have been placed. Once complete, the UB will house equipment to produce steam, compressed air, chilled water and hot water for operations.

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