



Blue Grass Chemical Agent-  
Destruction Pilot Plant

# Monthly Status Briefing

*March 2011*



**BGCAPP**  
Blue Grass Chemical  
Agent-Destruction Pilot Plant

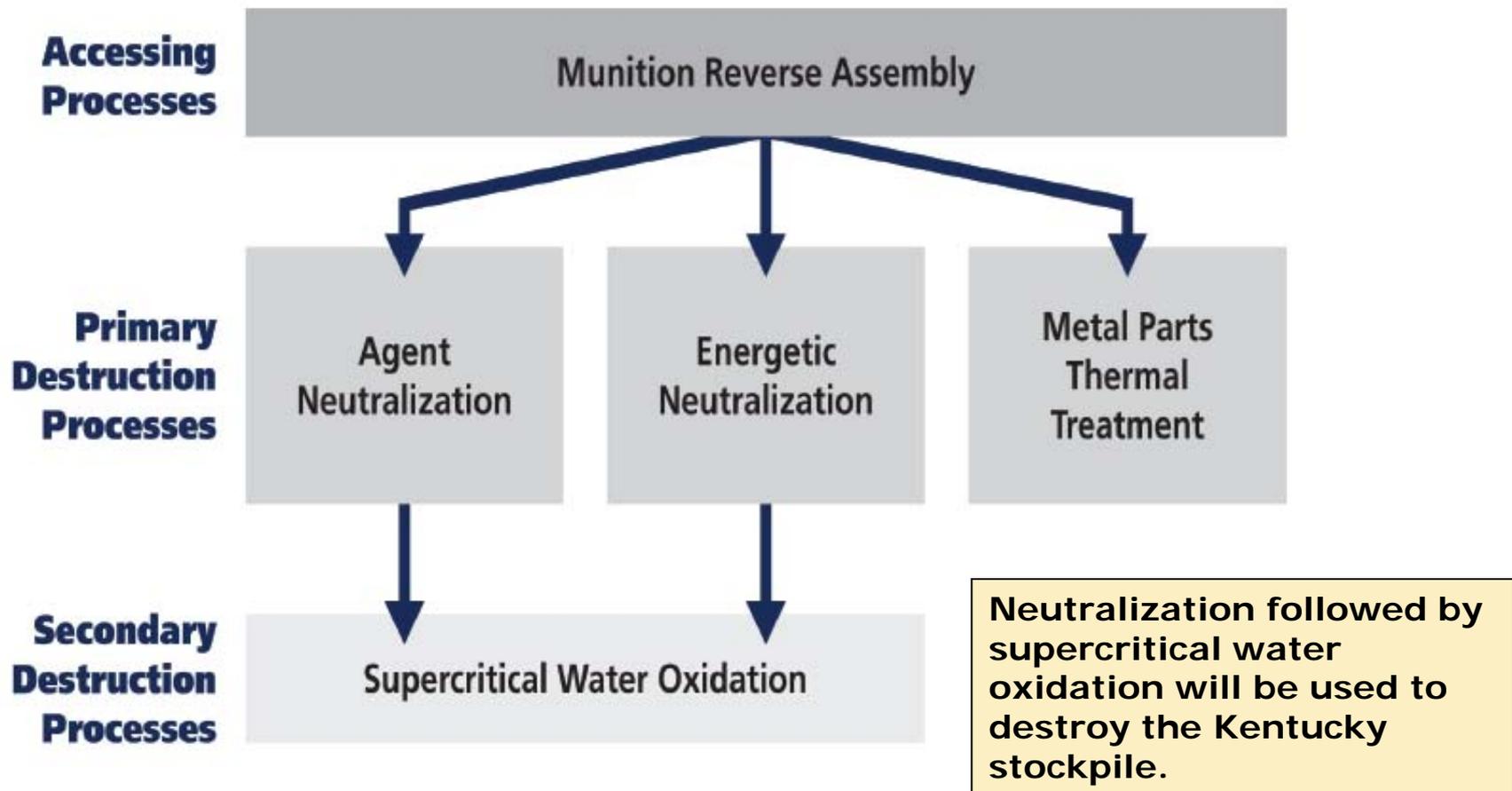
A PARTNERSHIP FOR SAFE CHEMICAL WEAPONS DESTRUCTION

# 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, Kentucky.
- 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 Manager, Assembled Chemical Weapons Alternatives (ACWA), 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 Washington Division, Battelle Memorial Institute, General Atomics and General Physics, is the systems contractor selected to design, build, systemize, pilot test, operate and close the BGCAPP.

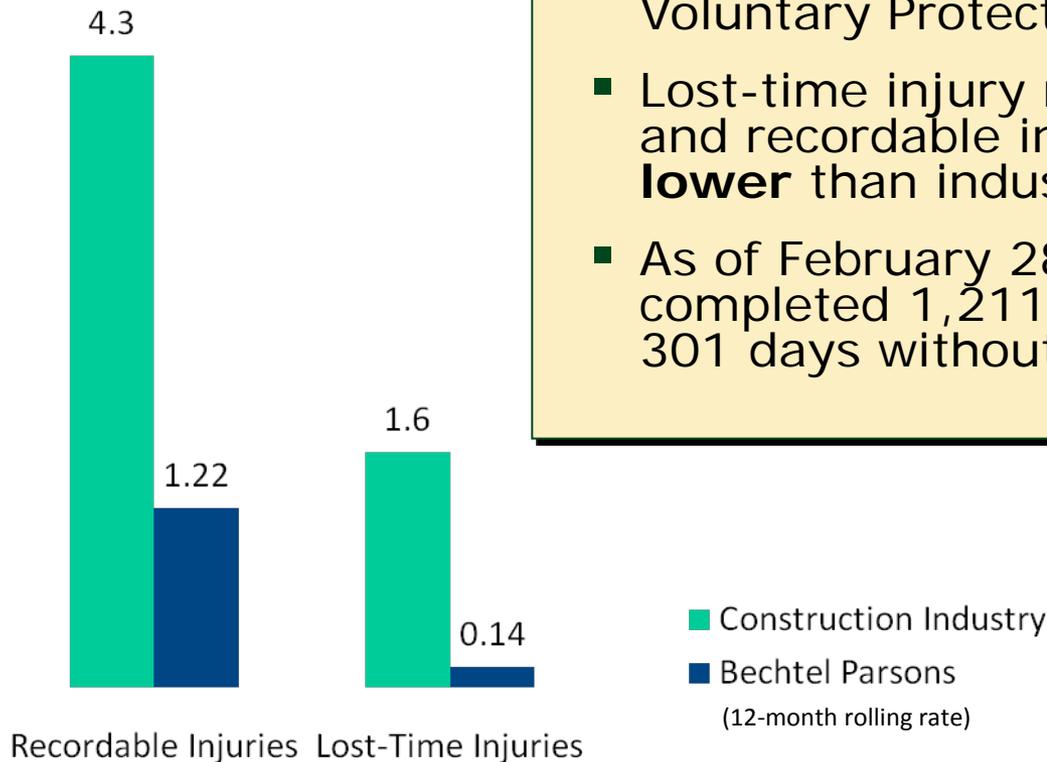


# Destruction Technology



# Safety

- Continued progress toward OSHA Voluntary Protection Program Star Status
- Lost-time injury rate **91 percent lower** and recordable injury rate **72 percent lower** than industry average
- As of February 28, 2011, the project has completed 1,211,080 hours and 301 days without a lost-time accident.



Accidents per 200,000 job hours



# Current Project Staffing

- **Total project employment—864**
- **Richmond, KY—668:**
  - Nonmanual—378
  - Craft—290
  - Local hires—54 percent
- **Other locations—196**
  - Pasco, WA
  - San Diego, CA
  - Columbus, OH
  - Frederick, MD



The BGCAPP project team has surpassed more than 1 million consecutive safe work hours without a lost-time injury.

## ■ Acquisitions

- More than \$70.1 million spent with Kentucky companies of which \$42.5 million has been spent in Madison and surrounding counties

## ■ Payroll

- Approximately \$185 million of local payroll paid to date
- More than \$442 million more to be paid remainder of project

# Construction Work in Progress

- **Munitions Demilitarization Building (MDB)**
  - Concrete walls and second-lift horizontal concrete
  - Structural steel
  - Interior wall panels
- **Control and Support Building**
  - Electrical and piping systems
  - Heating, ventilation and air conditioning (HVAC)
  - Interior lighting
  - Metal wall studs
- **Utility Building (UB)**
  - Boilers and support equipment
  - Piping and interior lighting
- **Supercritical Water Oxidation (SCWO) Building**
  - Concrete foundation



The BGCAPP workforce continued major construction efforts on the Control and Support Building (at left) and Munitions Demilitarization Building as project construction now totals 30 percent complete.

# Munitions Demilitarization Building (MDB)



**BGCAPP construction craft workers (above left) make an early morning MDB concrete wall placement. Meanwhile, interior wall panels are being installed (above right) within the MDB. The MDB is where the chemical weapons will be disassembled, explosives removed and the agent neutralized.**

# Control and Support Building (CSB)



BGCAPP craft workers' efforts to safely install electrical cable tray and metal wall studs are taking shape within the CSB.

Once complete, the CSB will house the control room and integrated control system used to operate BGCAPP.



# Supercritical Water Oxidation (SCWO) Building



BGCAPP craft workers completed another SCWO concrete foundation placement (at left); and continued reinforcing steel installation to prepare for more concrete placements.

Meanwhile, crews at the laydown area (below) received SCWO process tanks, part of the Blue Grass specific equipment for the SCWO.



The SCWO Building will house the reactors where agent and energetic hydrolysates, a byproduct of the neutralization process, will be subjected to very high temperatures and pressures to destroy the hydrolysates' organic content.

# Utility Building (UB)



The UB, which will house equipment to produce steam, compressed air, chilled water and hot water for operations, is a hub of indoor activity. BGCAPP craft workers (above left) continued installing support steel and equipment around a trio of placed boilers. At the opposite end of the UB (above right), workers are fitting, installing and welding piping.

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