



Blue Grass Chemical Agent-  
Destruction Pilot Plant

# Monthly Status Briefing

*June 2011*



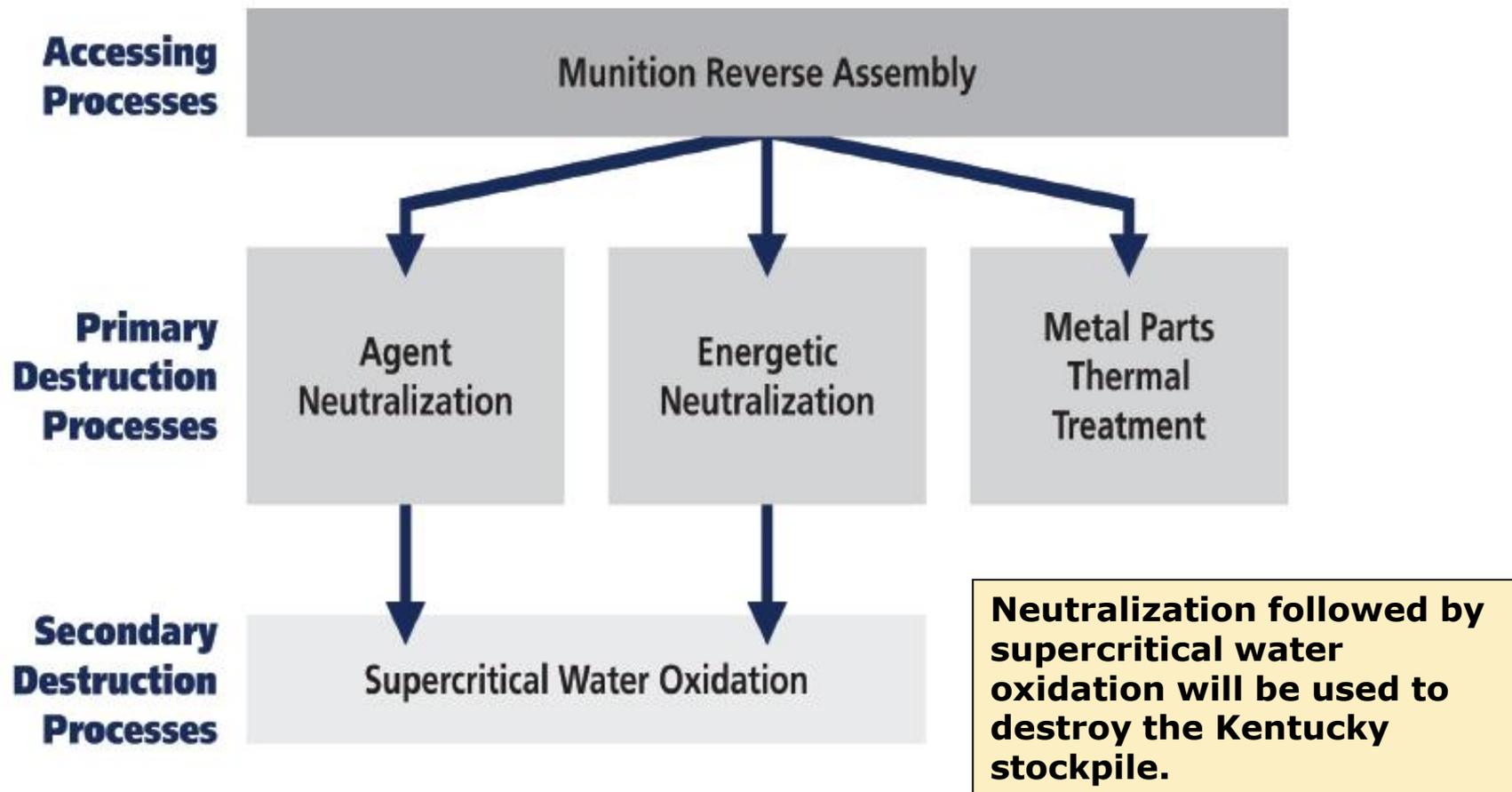
**BGCAPP**

# Project Background

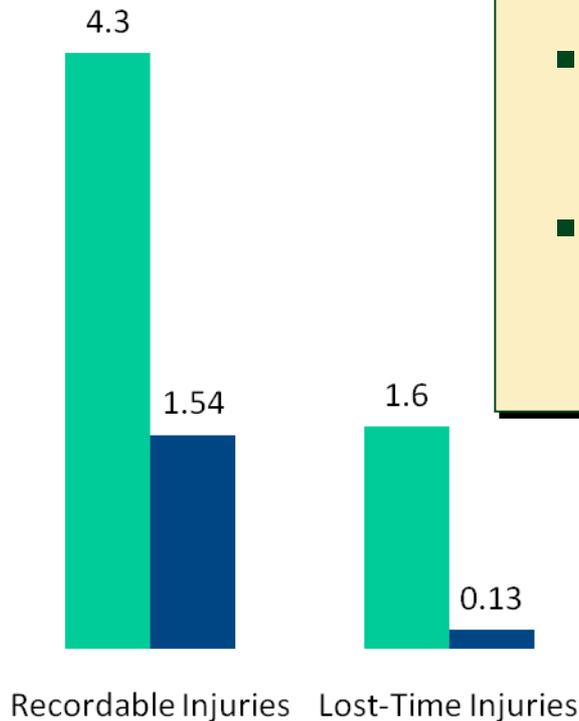
- The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will safely destroy 523 tons of chemical agent in rockets and artillery projectiles stored at the Blue Grass Army Depot in Richmond, Kentucky.
- The technology selected by the Department of Defense to destroy the Blue Grass chemical weapons 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 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



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

- Continued progress toward OSHA Voluntary Protection Program Star Status
- Lost-time injury rate **92 percent lower** and recordable injury rate **64 percent lower** than industry average
- As of May 31, 2011, the project has completed 288,195 hours and 73 days without a lost-time accident.



# Current Project Staffing

- **Total project employment—876**
- **Richmond, KY—700:**
  - Nonmanual—383
  - Craft—317
  - Local hires—56 percent
- **Other locations—176**
  - Pasco, WA
  - San Diego, CA
  - Columbus, OH
  - Frederick, MD



**With 700 workers now in Richmond, BGCAPP has maintained more than a 50-percent local hire rate.**

# Economic Impact

## ■ Acquisitions to date

- \$72.6 million spent with Kentucky companies
- \$43.8 million spent in Madison and surrounding counties

## ■ Payroll to date

- \$193 million of local payroll paid
- \$434 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
  - Electrical and piping systems
- **Control and Support Building (CSB)**
  - Electrical and piping systems
  - Heating, ventilation and air conditioning (HVAC)
  - Metal wall studs and sheet rock
- **Supercritical Water Oxidation (SCWO) Building**
  - Concrete foundation
- **Utility Building**
  - Electrical and piping systems
- **Bulk Chemical Storage Area**
  - Concrete containment wall



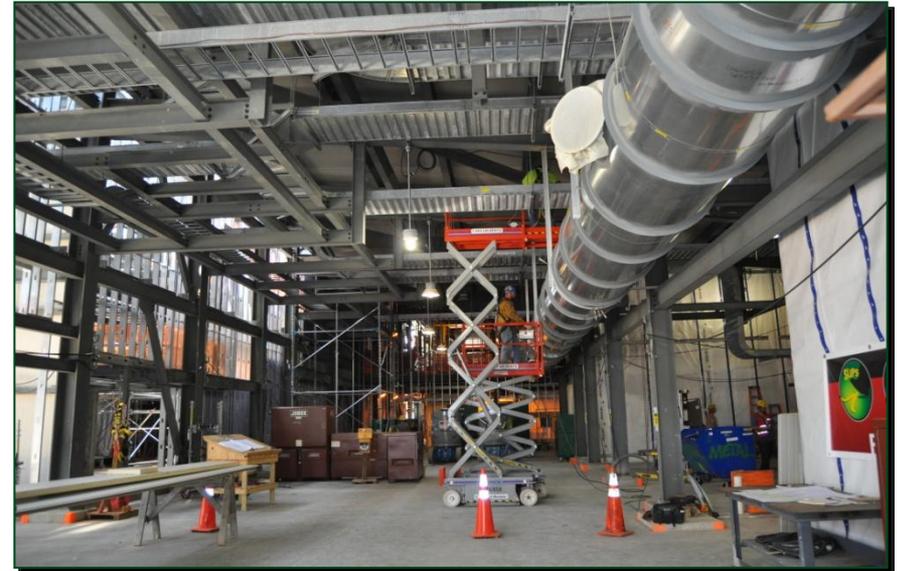
**With the CSB now enclosed, the MDB structural steel is changing the skyline at the BGCAPP construction site.**

# Munitions Demilitarization Building (MDB)



**Construction activities at the MDB are reaching new heights as BGCAPP craft workers (above left) continued installing structural steel using large cranes and lift baskets. Meanwhile (above right) craft workers completed the initial second-lift concrete placement at the MDB. The MDB is where the chemical weapons will be disassembled, explosives removed and the agent neutralized.**

# Control and Support Building (CSB)



**BGCAPP construction craft workers (above left) assemble a CSB, Munitions Demilitarization Building supply air plenum which will eventually be installed atop the CSB. Inside the CSB, craft workers (above right) continued installing HVAC duct, electrical cable tray, metal wall studs and piping. Once complete, the CSB will house the control room and integrated control system used to operate BGCAPP.**

# Supercritical Water Oxidation (SCWO) Building



**BGCAPP construction craft workers (above, top left) completed the final SCWO Building (above center) concrete foundation placement earlier this month. 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.**

# Bulk Chemical Storage (BCS) and Utility Building (UB)



The BGCAPP team has completed the BCS concrete foundation and containment wall (above left). Once complete, the BCS area will house four distinct chemicals required to support the neutralization followed by SCWO process.

Inside the fully-enclosed UB, craft workers (below right) are installing electrical cable tray, interior lighting and equipment. 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

