



Blue Grass Chemical Agent-  
Destruction Pilot Plant

# Monthly Status Briefing

*July 2011*

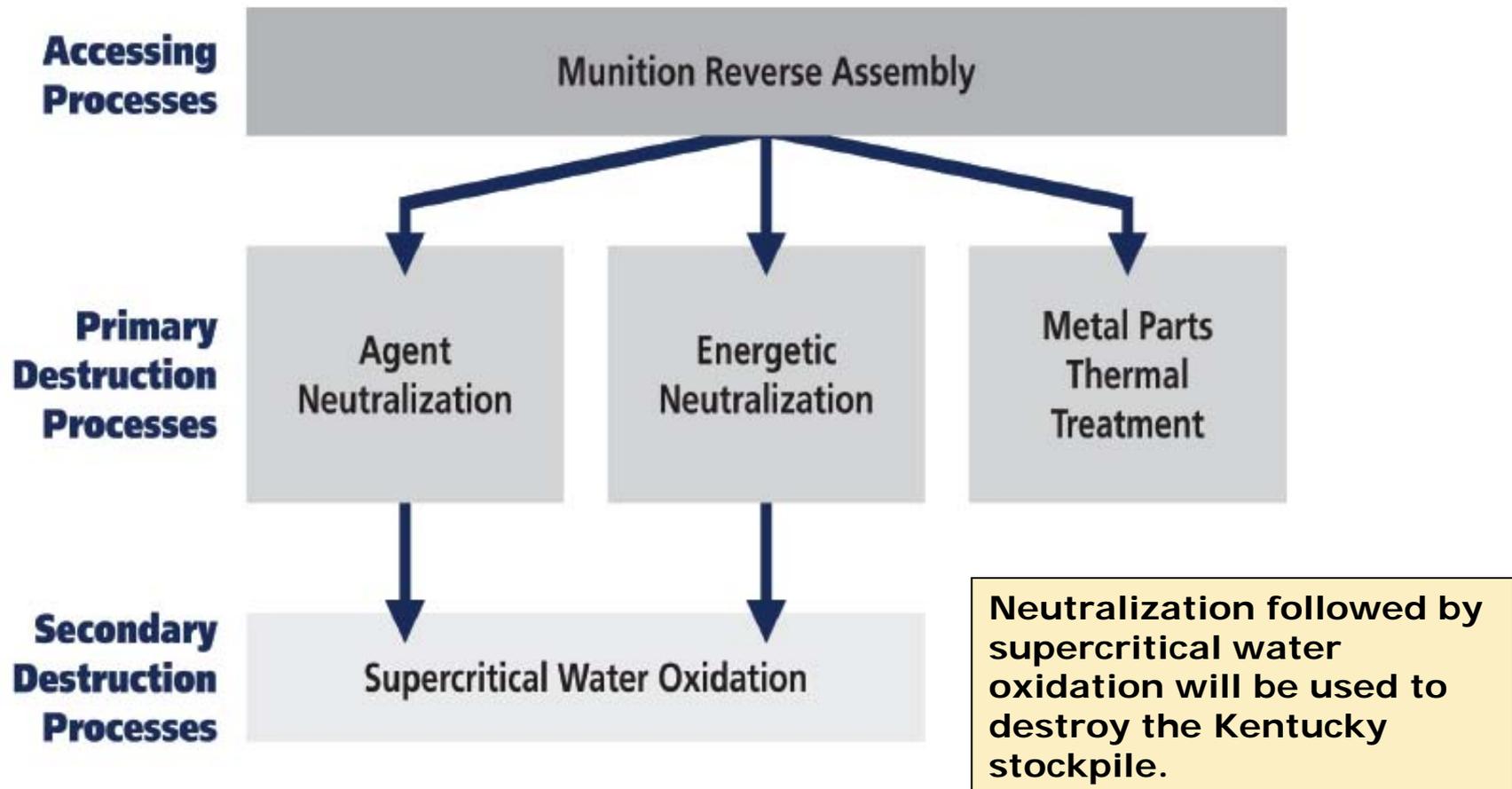


**BGCAPP**

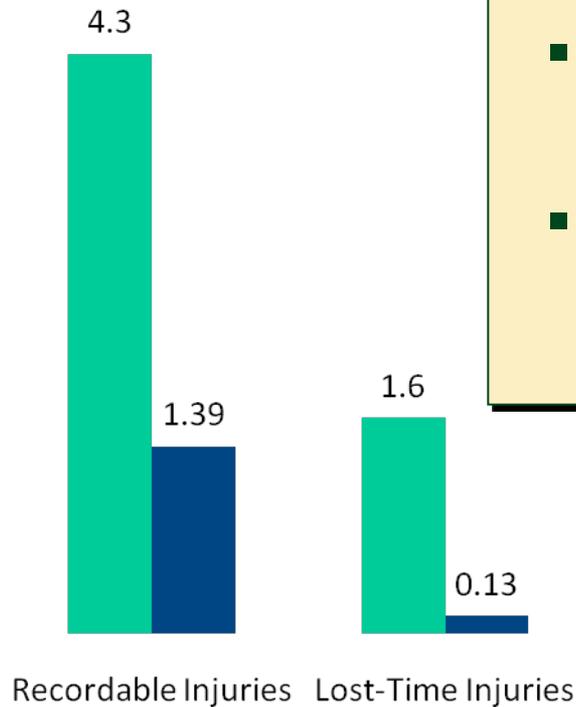
# Project Background

- 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 **68 percent lower** than industry average
- As of June 30, 2011, the project has completed 431,278 hours and 113 days without a lost-time accident.



# Current Project Staffing

- **Total project employment—868**
- **Richmond, KY—701:**
  - Nonmanual—394
  - Craft—307
  - Local hires—54 percent
- **Other locations—167**
  - Pasco, WA
  - San Diego, CA
  - Columbus, OH
  - Frederick, MD



More than 300 skilled craft workers are safely working at the BGCAPP construction site.

## ■ Acquisitions to date

- \$73.3 million spent with Kentucky companies
- \$44.1 million spent in Madison and surrounding counties

## ■ Payroll to date

- \$196 million of local payroll paid
- \$431 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 and wall paneling
  - Electrical and piping systems
- **Control and Support Building (CSB)**
  - Metal wall studs and sheet rock
  - Electrical, piping and fire detection systems
  - Heating, ventilation and air conditioning (HVAC)
- **Supercritical Water Oxidation (SCWO) Building**
  - Concrete foundation and structural steel
- **Utility Building**
  - Electrical, piping and HVAC systems
- **Laboratory Building**
  - Excavations and underground utilities



The massive structures of the enclosed CSB (front) and MDB (back) have been a hub of construction activity during the summer months.

# Munitions Demilitarization Building (MDB)



**BGCAPP construction craft workers (above left) continued MDB elevated work by installing reinforcing steel for more horizontal concrete and wall placements. MDB structural steel erection also continued as a BGCAPP craft worker (above right) is safely perched atop a beam, ready to guide another piece into place. The MDB is where the chemical weapons will be disassembled, explosives removed and the agent neutralized.**

# Control and Support Building (CSB)



The CSB interior rooms are taking shape as BGCAPP construction craft workers (above left) are installing metal studs, sheet rock, electrical and HVAC systems inside the building. At other interior locations, craft workers (above right) are busy installing piping systems. Once complete, the CSB will house the control room and integrated control system used to operate BGCAPP.

# Supercritical Water Oxidation (SCWO) Building



The SCWO Building concrete foundation is complete and craft workers (above) have begun erecting structural steel. 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.

# Utility Building (UB) and Laboratory Building



Inside the fully-enclosed UB, BGCAPP craft workers (above) install HVAC ductwork among the erected structural steel and piping infrastructure. Once complete, the UB will house equipment to produce steam, compressed air, chilled water and hot water for operations.

At the Laboratory Building, craft workers (below) are performing foundation excavations and preparing formwork for upcoming concrete placements. The Laboratory will handle and analyze low concentrations of chemical agent when BGCAPP operations begin.



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