



Blue Grass Chemical Agent-
Destruction Pilot Plant

Monthly Status Briefing

September 2012



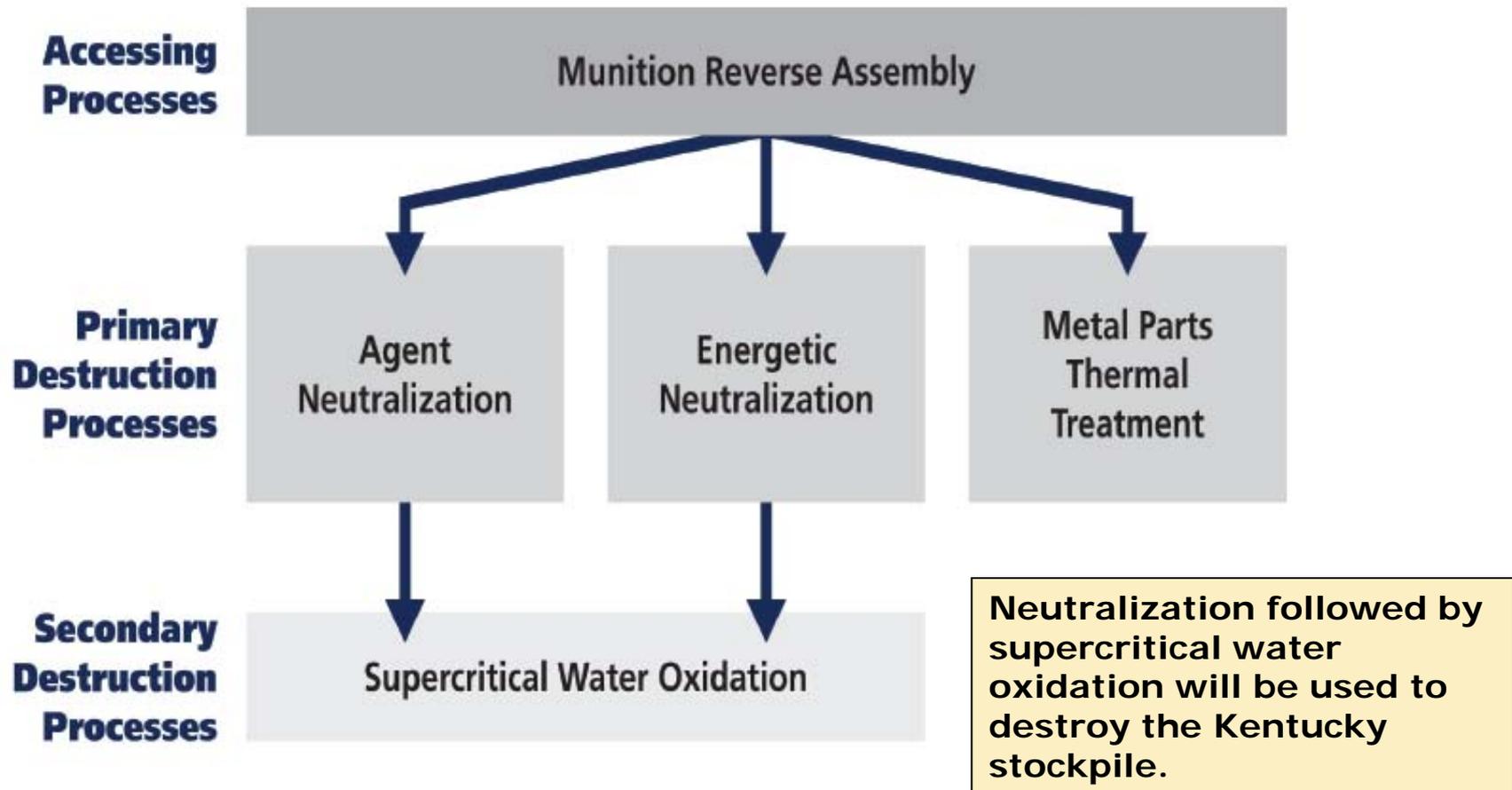
BGCAPP

Project Background

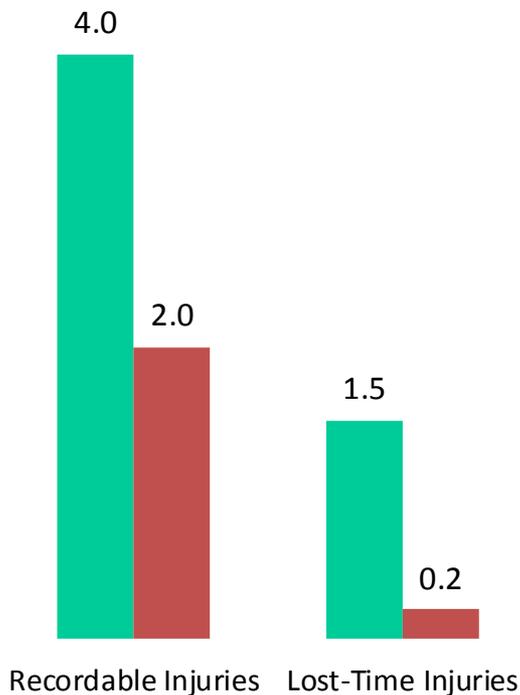
- The Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) will safely destroy 523 tons of chemical agent in rockets and artillery projectiles stored at the Blue Grass Army Depot in Richmond, Ky.
- The technology selected by the Department of Defense to destroy the Blue Grass chemical weapons stockpile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



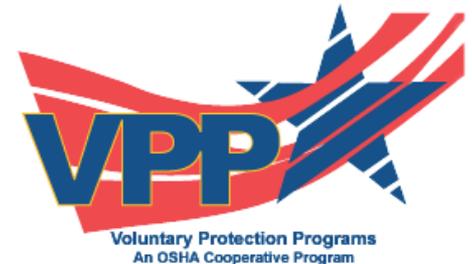
Safety



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 **50 percent lower** than industry average
- As of August 31, 2012, the project has completed 351,552 hours and 78 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—1,018**
- **Richmond, Ky.—954**
 - Nonmanual—468
 - Craft—486
 - Local hires—59 percent
- **Other locations—64**
 - Pasco, Wash.
 - San Diego, Calif.
 - Columbus, Ohio
 - Frederick, Md.



The Blue Grass Chemical Agent-Destruction Pilot Plant project employs 1,018 workers.

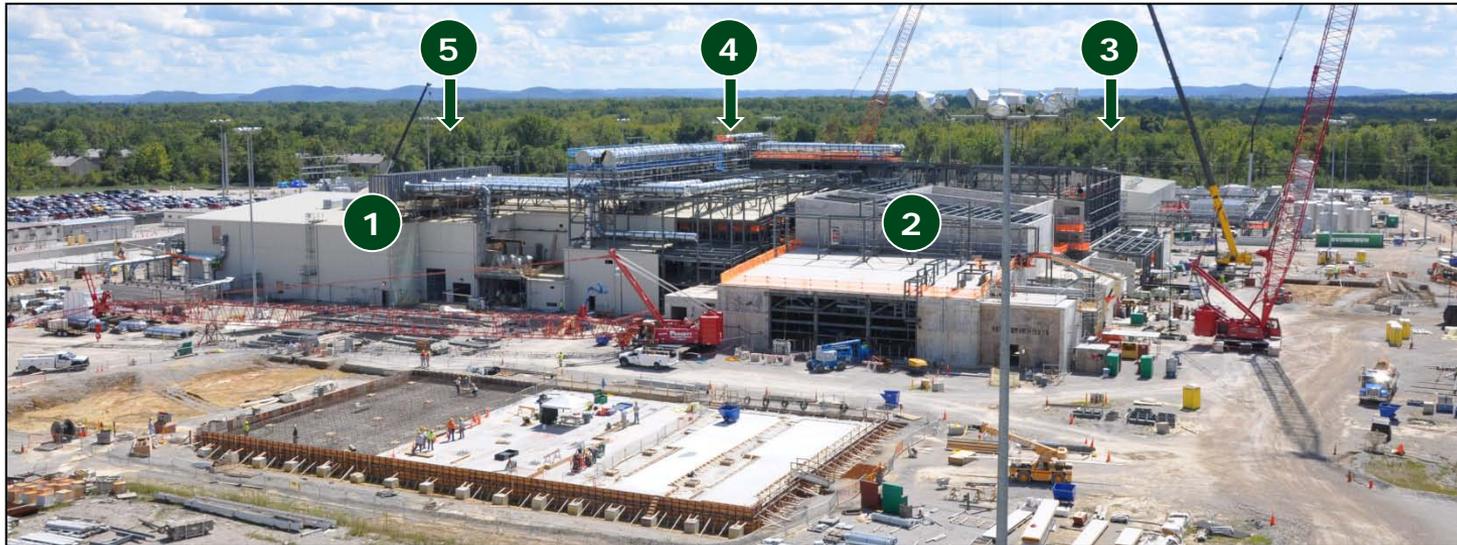
- **Acquisitions to date**

- \$86.8 million spent with Kentucky companies
- \$48.2 million spent in Madison and surrounding counties

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

- \$358 million of local payroll paid
- \$452 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)
- Instrument rack room flooring

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
- Concrete pads for exterior utilities
- Interior electrical and piping systems

4 Supercritical Water Oxidation (SCWO) Process Building (not visible in photo)

- Structural steel, process tanks and equipment

5 Laboratory Building (not visible in photo)

- Exterior entrance stairs
- Final construction punchlist activities

Control and Support Building (CSB)



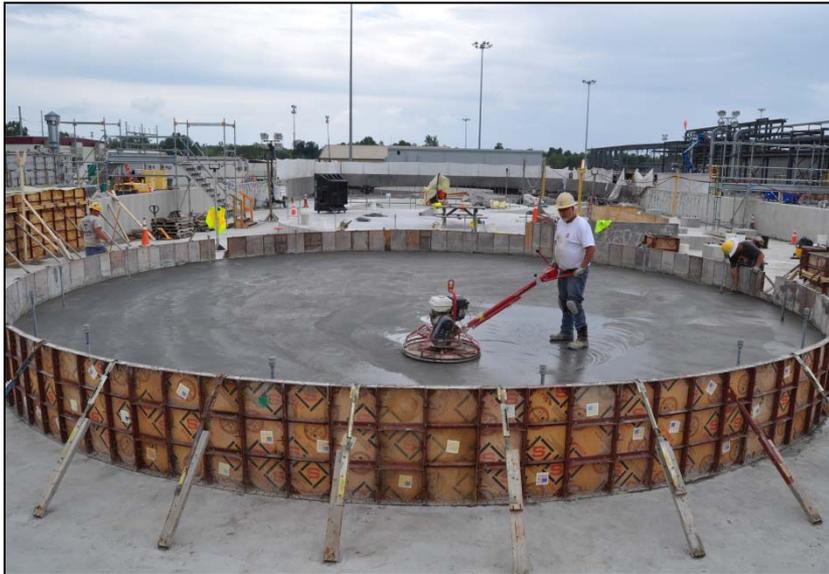
Craft workers connect exterior heating, ventilation and air conditioning (HVAC) ductwork (above left) into the CSB. Inside the CSB, HVAC ductwork leak testing (above right) is under way to ensure high-quality installation standards. Once complete, the CSB will house the control room and the integrated control system used to operate the plant.

Munitions Demilitarization Building (MDB)



A BGCAPP craft worker welds piping penetration plating (above left) inside an MDB explosive containment room where the chemical weapons will be disassembled during plant operations. Outside the explosive containment rooms, structural steel and exterior siding installation continues. The MDB is where the chemical weapons will be disassembled, the explosives removed and the agent neutralized.

Hydrolysate Storage Area (HSA) and Laboratory Building



A craft worker finishes a recent HSA concrete placement (above left). Workers have completed the HSA concrete foundation and have begun applying concrete protective coatings. The Laboratory Building (above right) is nearing construction completion and will soon begin early systemization activities. During operations, agent and energetic hydrolysates, byproducts of the neutralization process, are emptied into HSA holding tanks once agent destruction is verified. During operations, the Laboratory's functions will include verifying agent destruction before hydrolysates are emptied into HSA holding tanks to await transfer to the Supercritical Water Oxidation Process Building.

Utility Building (UB) and Utility Power Centers (UPCs)



Inside the UB, craft workers install piping components (above left). Craft workers install underground electrical conduit (above right) to support various UPCs under construction throughout the site. Once complete, the UB will house equipment to produce steam, compressed air, chilled water and hot water for operations. During operations, the UPCs will distribute electrical power to BGCAPP facilities.

Blue Grass Chemical Agent-Destruction Pilot Plant

