



Blue Grass Chemical Agent-
Destruction Pilot Plant

Monthly Status Briefing

April 2011



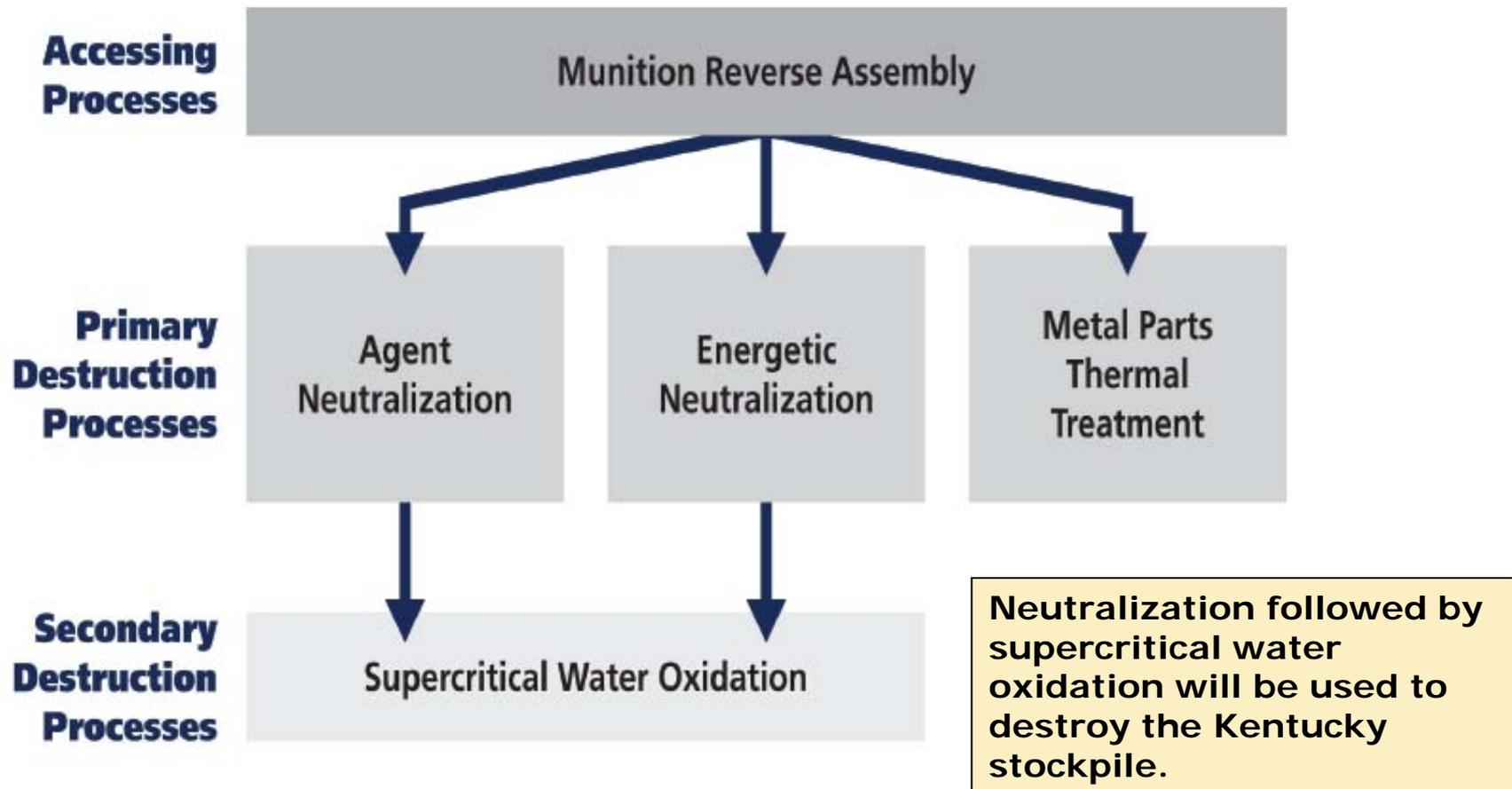
BGCAPP
Blue Grass Chemical
Agent-Destruction Pilot Plant

A PARTNERSHIP FOR SAFE CHEMICAL WEAPONS DESTRUCTION

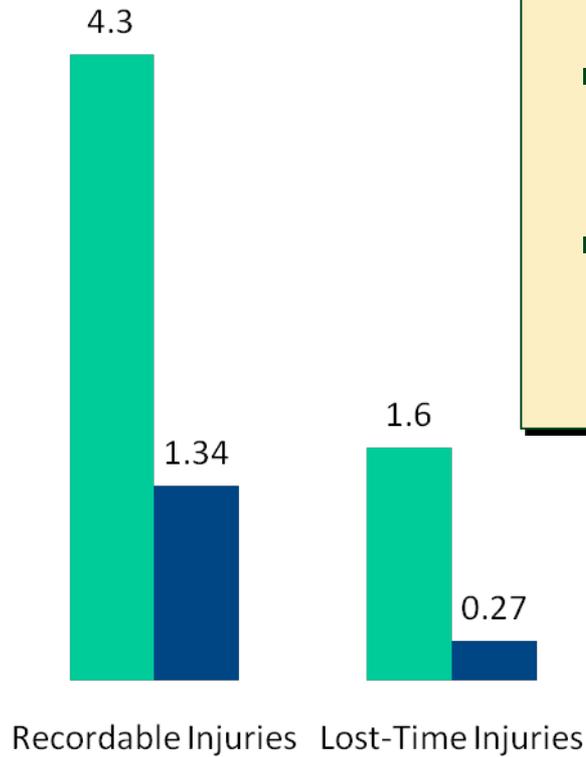
Project Background

- 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 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 **83 percent lower** and recordable injury rate **69 percent lower** than industry average
- As of March 31, 2011, the project has completed 118,975 hours and 22 days without a lost-time accident.

■ Construction Industry
■ Bechtel Parsons
(12-month rolling rate)

Accidents per 200,000 job hours



Current Project Staffing

- **Total project employment—852**
- **Richmond, KY—672:**
 - Nonmanual—377
 - Craft—295
 - Local hires—55 percent
- **Other locations—180**
 - Pasco, WA
 - San Diego, CA
 - Columbus, OH
 - Frederick, MD



Nearly 300 craft workers are at the BGCAPP site focusing on continuing the momentum of construction progress.

■ Acquisitions

- More than \$71.4 million spent with Kentucky companies of which \$43.3 million has been spent in Madison and surrounding counties

■ Payroll

- Approximately \$187 million of local payroll paid to date
- More than \$440 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
 - Wall panels and piping systems
- **Control and Support Building**
 - Electrical and piping systems
 - Heating, ventilation and air conditioning (HVAC)
 - Interior lighting
 - Metal wall studs
- **Utility Building (UB)**
 - Piping and interior lighting
 - Exterior louvers
- **Supercritical Water Oxidation (SCWO) Building**
 - Concrete foundation



The BGCAPP team continued progress at the construction site during April. Craft workers (above) safely install structural steel at the MDB.

Munitions Demilitarization Building (MDB)



BGCAPP construction craft workers (above left) assemble formwork to support an upcoming MDB elevated concrete floor placement. Workers (above right) install a stairway within the MDB structural steel. The MDB is where the chemical weapons will be disassembled, explosives removed and the agent neutralized.

Control and Support Building (CSB)



Major efforts continued at the CSB as workers (at left) support additional HVAC installation activities. Meanwhile (below) large air inlets are staged awaiting installation.

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 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. Craft workers, operating heavy equipment, (above left) receive and warehouse the SCWO aluminum filtration system filters, which are Blue Grass Specific Equipment. Meanwhile (above right) workers make another steel-laced, SCWO concrete foundation placement.

Utility Building (UB)



Progress on interior lighting and piping rack installations (at left) can be seen inside the UB. On the UB exterior, workers (below) safely install louvers to shield the interior boilers from the elements.



Once complete, the UB will house equipment to produce steam, compressed air, chilled water and hot water for operations.

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