

Monthly Status Briefing

July 2009



Pueblo Chemical Agent-Destruction Pilot Plant

PCAPP
Pueblo Chemical
Agent-Destruction Pilot Plant

A PARTNERSHIP FOR SAFE CHEMICAL WEAPONS DESTRUCTION

Project Background



- **The Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) will safely destroy 2,611 tons of mustard agent in mortar rounds and artillery projectiles stored at the U.S. Army Pueblo Chemical Depot.**
- **Neutralization followed by biotreatment is the technology selected by the Department of Defense to destroy the Pueblo chemical weapons stockpile.**
- **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 Colorado and Kentucky.**
- **The Bechtel Pueblo Team, a partnership of Bechtel National, Inc.; Washington Demilitarization Company/URS; Parsons; and Battelle Memorial Institute, is the systems contractor selected to design, build, systemize, pilot test, operate and close PCAPP.**



Staffing

- **Bechtel Pueblo Team non-manual: 282**
 - Pueblo – 275 (95 local hires)
 - Other locations – 7
- **Construction Workers:**
 - Bechtel direct hire – 211
 - Subcontractor personnel – 29



Subcontract Awards

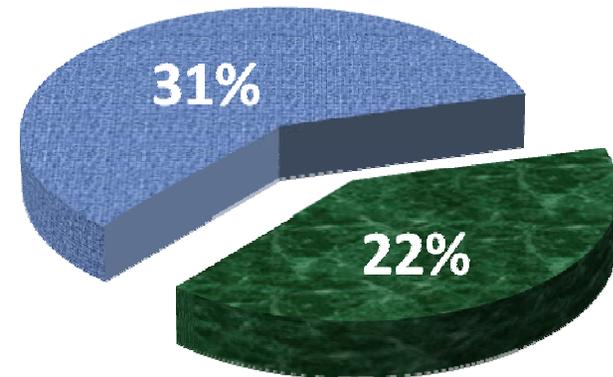
Inception to date, as of June 30

Total Awards in Millions



- Pueblo County Businesses
- Colorado Businesses (outside Pueblo County)
- Businesses Outside Colorado

Awards to Pueblo County and Colorado Businesses



- Pueblo County
- Colorado

Acquisition Awards Status

FY 2009 Upcoming Awards:

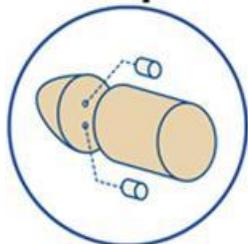
- **Subcontracts**
 - Piping Equipment and Heat Tracing
 - General Painting
 - Modular Medical Trailers

- **Materials**
 - Misc. Construction Materials
 - Gypsum Drywall
 - Belt Conveyers
 - Pumps
 - Pipe Supports



Destruction Technology

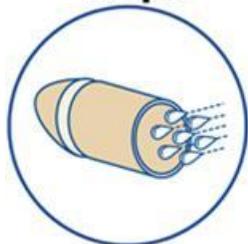
Step 1



REMOVAL OF ENERGETICS

Robotic equipment removes energetics (explosives) from the weapon. The energetics will be disposed of at a permitted facility off site.

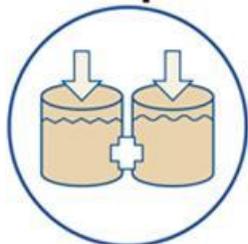
Step 2



REMOVAL OF MUSTARD AGENT

The inside of the weapon is remotely accessed, and mustard agent is washed out with high-pressure water.

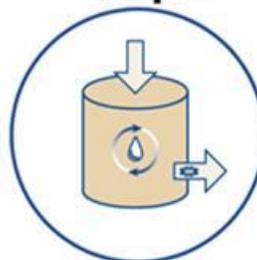
Step 3



NEUTRALIZATION OF MUSTARD AGENT

The mustard agent is neutralized with caustic solution and hot water. The byproduct is called hydrolysate.

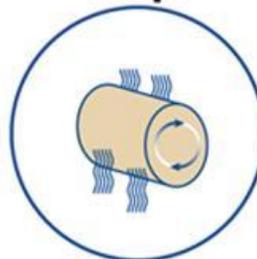
Step 4



BIOTREATMENT

The hydrolysate is treated with microbes that break down the solution into water and biosludge. Water is recycled in the plant, and biosludge is shipped for disposal at a permitted facility.

Step 5



DISPOSAL OF METAL PARTS

Metal parts are heated to 1,000 degrees Fahrenheit for 15 minutes and can then be recycled.

Neutralization followed by biotreatment will be used to destroy the Colorado chemical weapons stockpile.

Construction Status - Complete

- Multipurpose building
- Underground infrastructure (utilities)
- Switch gear foundation pads
- Utility building structure
- Agent filtration area, filtration stack and pipe rack foundations
- Automated guided vehicle corridor – foundation, curbs/piers, structural steel
- Tank foundations
- Energetics service magazine corridor foundation



Construction Status – In Progress

- **Agent Processing Building** – miscellaneous platform erection, siding and roofing, Heating Ventilation and Air Conditioning (HVAC), cable tray, fire protection & process piping and equipment
- **Enhanced Reconfiguration Building** – concrete foundation slab, explosion containment and vapor control rooms rebar and formwork and structural steel
- **Pipe Rack** – vertical construction, pipe and cable tray
- **Biotreatment area pipe rack and brine tank containment walls**
- **Excavation, formwork, rebar for control support building, munitions service magazine corridor and entry control facility**
- **Field erected tanks** – process water, sanitary, fuel, hydrolysate, brine, sanitary, caustic, reverse osmosis and firewater
- **Utility building/broiler** – cable tray, HVAC, electrical equipment, piping and structural steel



PCAPP Site Overview



Northwestern Corner - Observation Point

- 1 Pipe Rack
- 2 Agent Processing Building
- 3 Automated Guided Vehicle Corridor
- 4 Enhanced Reconfiguration Building



Purple Chemical Agent
Destruction Plant Plant

OPSEC Complete 30 June 2009

Agent Processing Building



Mustard agent will be destroyed in the neutralization bay.



Enhanced Reconfiguration Building



Rebar and formwork are in place for the walls of the explosive containment room.

Linear Projectile/Mortar Disassembly system



The LPMD system is currently being tested at the Anniston Chemical Agent Disposal Facility. Similar systems will be used to dismantle munitions at PCAPP.

Construction Site Tours



U.S. Sen. Mark Udall addresses the media on his recent PCAPP tour. From left: Bechtel Project Manager Paul Henry; Senator Udall; PCAPP Site Project Manager Gary Anderson; and Lt. Col. Christopher Chesney, U.S. Army Pueblo Chemical Depot commander.



Pueblo Chemical Agent-Destruction Pilot Plant



PCAPP Site Plan



Contact Information



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U.S. Army Element, Assembled
Chemical Weapons Alternatives

