

Monthly Status Briefing

December 2014



Pueblo Chemical Agent-Destruction Pilot Plant



Program Executive Office
Assembled Chemical Weapons Alternatives



PCAPP

Pueblo Chemical Agent-Destruction Pilot Plant

www.peoacwa.army.mil



A PARTNERSHIP FOR SAFE CHEMICAL WEAPONS DESTRUCTION

Project Background



The Program Executive Officer, 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 Colorado and Kentucky.



Pueblo Chemical Agent-
Destruction Pilot Plant

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 (PCD).

- Neutralization followed by biotreatment is the technology selected by the Department of Defense to destroy the Pueblo chemical weapons stockpile.



The Bechtel Pueblo Team (BPT) is a partnership of Bechtel National, Inc., URS, Parsons, and Battelle Memorial Institute. The BPT functions as the systems contractor selected to design, build, systemize, pilot test, operate, and close the PCAPP.



Staffing



Bechtel Pueblo Team:
1,150

- Pueblo County local hires: 323
- Colorado hires (outside Pueblo County): 88
- From other locations: 739

Employment Opportunities



Hotline

(719)549-4003

Website

<http://pueblo.bechtel.com>

As of November,
30 2014, PCAPP
staff
accomplished:

948

Safe Work Days*

5,670,733

Safe Work Hours



* Last Lost Time occurred on April 26, 2012

Step 1



Removal of Energetics

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

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

Microbes treat the hydrolysate, breaking it down into brine. The brine is separated with water being recycled back to the plant and salt cakes shipped for disposal at a permitted facility.

Step 5



Thermal Treatment and 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.

Explosive Destruction System

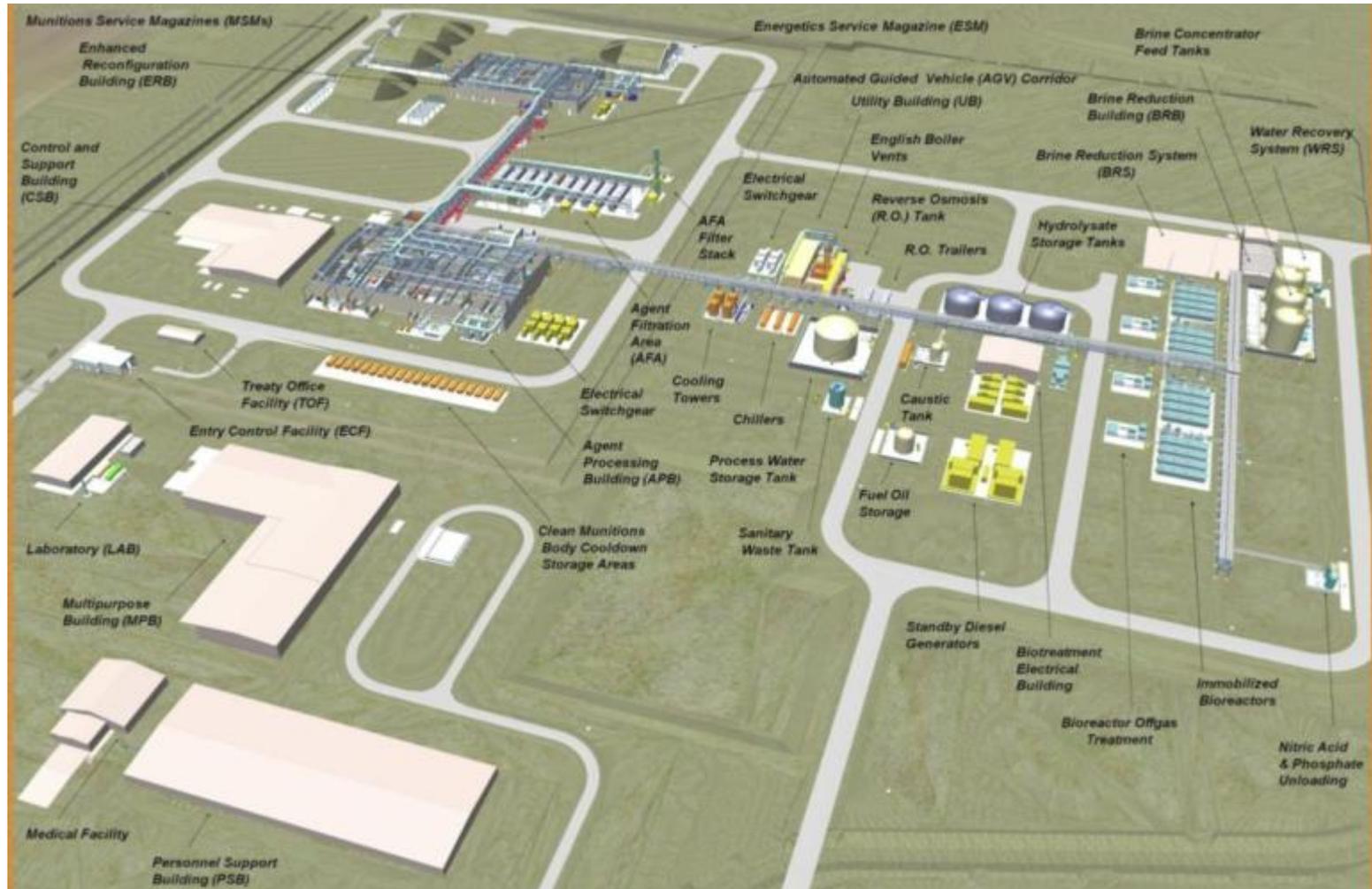


- The Army's Explosive Destruction System (EDS) will augment the Pueblo pilot plant's automated destruction technology
- EDS will be used to destroy problematic munitions that are unsuited for automated processing

- EDS uses explosive “cutting” charges to access the chemical agent inside a munition; neutralization chemicals are then added to destroy the chemical agent



Pueblo Chemical Agent-Destruction Pilot Plant—Site Plan



PCAPP Site Overview



Northwestern Corner - Observation Point

- | | | | |
|----------|------------------------------------------|----------|--------------------------------------------|
| 1 | Enhanced Reconfiguration Building | 5 | Agent Filtration Area |
| 2 | Automated Guided Vehicle Corridor | 6 | Munitions Service Magazine |
| 3 | Agent Processing Building | 7 | Control and Support Building |
| 4 | Biotreatment Area | 8 | Munitions Service Magazine Corridor |

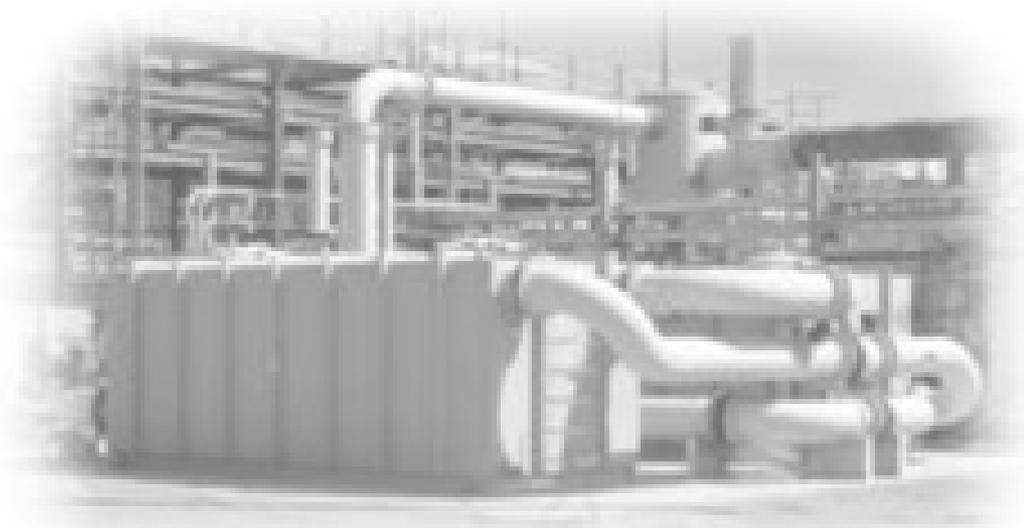
Turnover to Operations

As the project transitions from systemization to operations, the following systems have been turned over:

Systems

Toxic Storage and Spent Decon
Bulk Chemical Storage and Distribution
Security Essential Power Supply
Laboratory Ventilation System
Site Water System
Chilled Water System
Reverse Osmosis System
Process Water System
Instrument Air and Plant Air
Natural Gas
Fuel Oil System
Sanitary Waste
Enhanced Reconfiguration Building/Agent
Processing Building Material Handling Systems

Munitions Unpacking and Projectile Disassembly
Lighting System
Steam and Condensate System
Breathing Air System



To learn more about Systemization, watch the video at
http://www.peocwa.army.mil/info/video/systemization_yt.html

Turnover to Operations

As the project transitions from systemization to operations, the following facilities have been turned over:

Facilities

Biotreatment Electrical Building
Brine Reduction System Facility
Analytical Laboratory
Medical Facility
Multipurpose Building
Personnel Support Facility
Utility Building



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Enhanced Reconfiguration Building



Citizens' Advisory Commission members watch PCAPP operators unload munitions monitoring enclosures and reconfigure inert training munitions as they practice processing procedures in the Munitions Monitoring Area.

Buffer Storage



Pallets of inert training munitions, known formally as Assembled Chemical Weapons Alternatives Test Equipment or ATE, are stored in one of the Munitions Service Magazines as they await movement into the Traveling and Receiving Area of the Enhanced Reconfiguration Building.



Twenty-three Colorado State University-Pueblo students studying Environmental Toxicology, tour the laboratory at PCAPP. Laboratory Branch Operations Manager Brian Ramdwar gave an in-depth tour of the lab for these seniors and potential future employees.

Salvation Army Angel Tree Program



Through the generosity of PCAPP employees, the Salvation Army received one busload and two U-Haul trucks full of toys and bikes (with helmets) for children in need this holiday season. Rose Mertz, Pueblo Salvation Army program director, shown above, was “overwhelmed” by the generosity.

Contact Information



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Program Executive Office
Assembled Chemical Weapons Alternatives

