Monthly Status Briefing

March 2013

Pueblo Chemical Agent-Destruction Pilot Plant

Program Executive Office Assembled Chemical Weapons Alternatives

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

Bechtel Pueblo Team

Systems Contractor

- Project management
- Business services
- Safety and quality

BECHTEL

- Design/engineering
- Procurement/subcontracting
- Construction

Teaming Subcontractors

URS

- Systemization
- Pilot testing
- Operations
- Closure

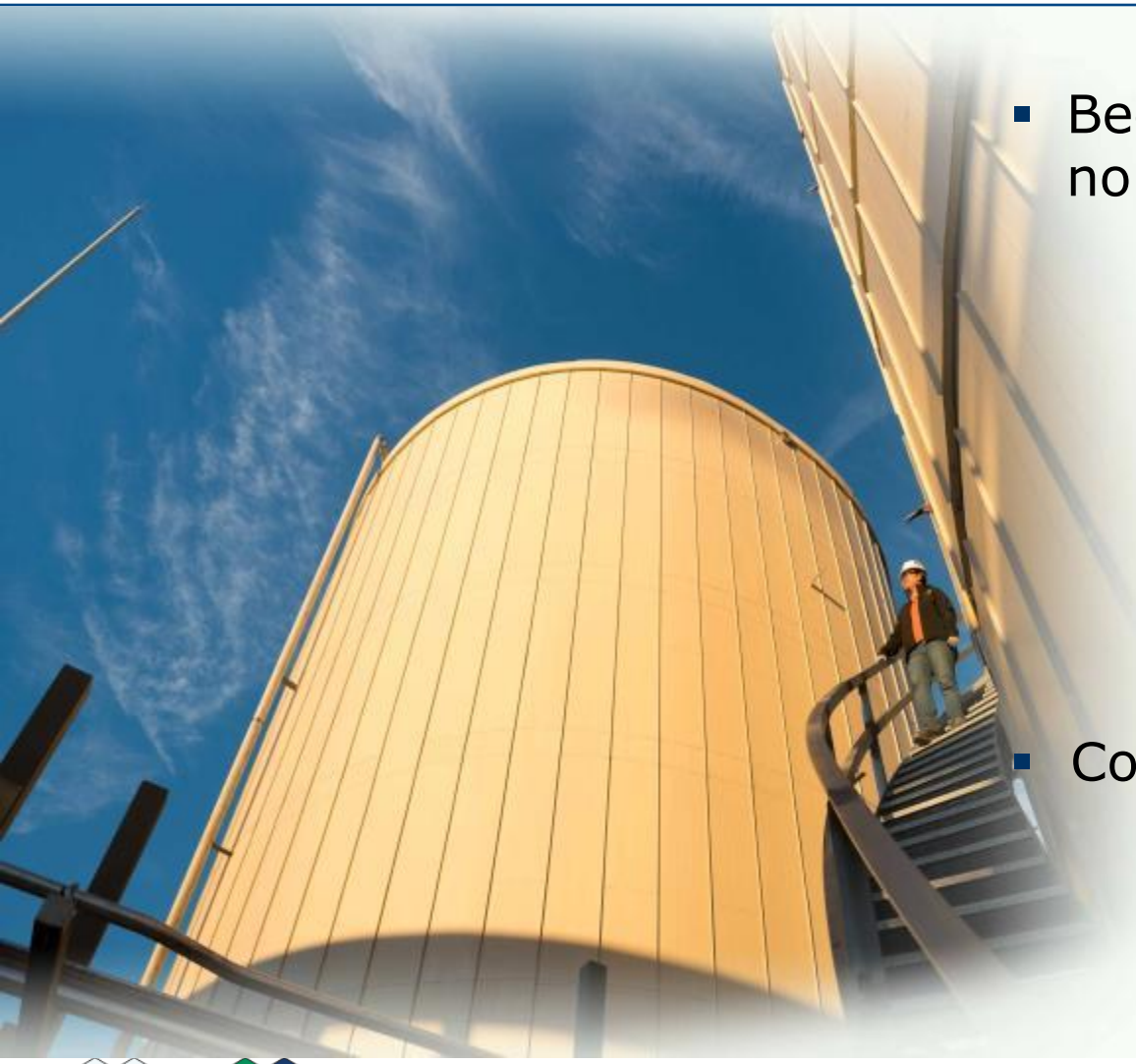
PARSONS

- Process design
- Process equipment fabrication
- Support to systemization and operations

Battelle

- Environmental permitting and compliance
- Laboratory management
- Pilot testing

Staffing



- Bechtel Pueblo Team non-manual: **623**
  - Pueblo: 620
    - Pueblo County local hires: 164
    - Colorado hires (outside Pueblo County): 33
  - Other locations: 3
- Construction Workers: **30**
  - Bechtel direct-hire craft workers: 27
  - Subcontractor personnel: 3

Employment Opportunities

Hotline

(719)549-4003

Website

http://pueblo.bechtel.com

As of February 28, 2013, PCAPP Project staff accomplished:

- 308 Safe Work Days*
- 1,593,996 Safe Work Hours

*Last Lost Time occurred on April 26, 2012

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 offsite.

Step 2

Removal of Mustard Agent

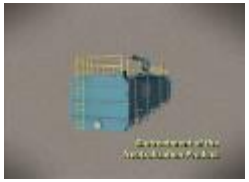
The inside of the weapon is remotely accessed and mustard agent is washed out with high-pressure water.

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.

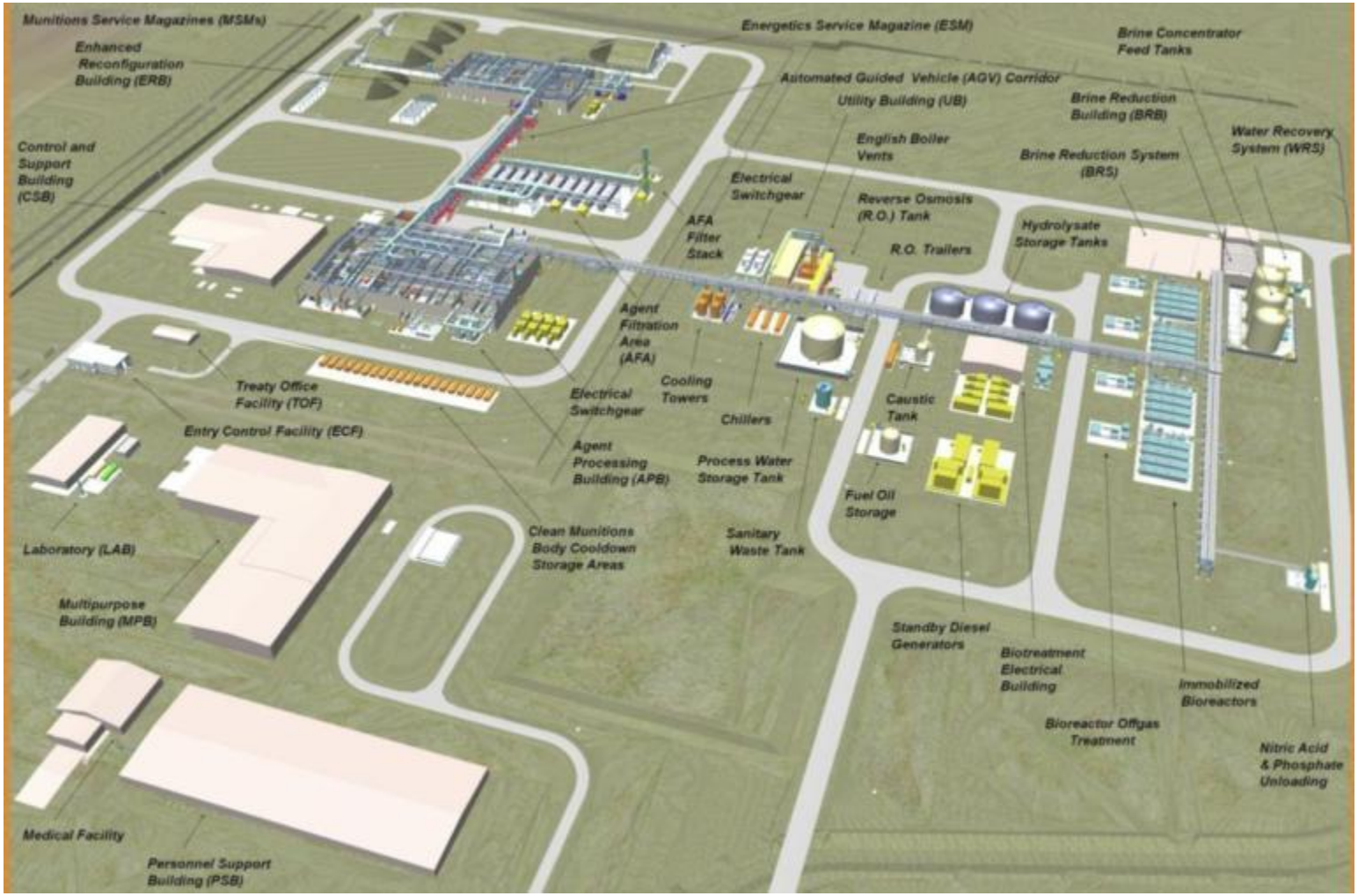
Step 5

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.

Pueblo Chemical Agent-Destruction Pilot Plant—Site Plan



PCAPP Site Overview

PCAPP MONTHLY STATUS BRIEFING

Northwestern Corner - Observation Point

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

Systemization

As the project transitions from construction to systemization, the following systems have been turned over to the start-up group to begin the systemization process:

- Agent Collection and Neutralization System—Hydrolysate Collection and Storage—Yard
- HVAC Hot Water—Pumps and related tanks, Heat Exchangers and Outside Rack Piping
- Breathing Air—A & B Compressor/Purifier Packages, Receiver and Chiller, Bottle Filling Station
- Enhanced Reconfiguration Building (ERB) HVAC: Supply Air Handling Units/Control Room and Support Areas Ventilation System; ERB Cascade Ventilation System
- Steam Supply—Fuel Oil Piping, Natural Gas Piping, Amine Feed Skid, Boilers A & B and Outside Rack Steam; Agent Processing Building (APB)/Biotreatment Area (BTA)/Brine Reduction System (BRS) Distribution
- ERB 480V Substation
- Bulk Chemical Storage and Distribution—DAP, UREA and 25% caustic
- Projectile Handling and Projectile Disassembly—Projectile Mortar Disassembly systems and Related Equipment—Lines 1, 2, and 3
- Brine Reduction Belt Feed System
- Chilled Water—Chillers, Distribution to various HVAC units, recirculation units, autoclave and Off-Gas Treatment scrubber
- Immobilized Cell Bioreactor (ICB) Feed, Biotreatment, ICB Blower and Off Gas Treatment—Modules 1/2/3/4
- Plant and Instrument Air; BTA, Agent Processing Building (APB) and ERB Distribution
- Potable water; ERB, APB and BRS

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

Systemization (cont.)

- Process Cooling Water—BRS Distribution
- Potable Water—ERB, APB and BRS
- ERB Electrical Room Ventilation System
- Munitions/Parts Monitoring-ERB
- Process Cooling Water—PCW pumps, tanks, chemical feed skids, cooling towers, BRS Distribution
- Main Sanitary Waste—Lift Stations, Waste Tank and Pumps
- Non-Essential Power Panel-Entry Control Facility (ECF)
- Critical Power Panels—ERB
- Essential Power Panel—ECF
- Water Recovery—Brine Concentrator Feed (BCF) Tanks "A", "B", and "C" and BCF Tanks Off-Gas Treatment

- APB—Munitions Washout System (MWS) Instrument Air Distribution; Process Water Distribution; Hydraulic Power Line 1 & 2; Hot Process Water Tank and Heating Coil; MWS High Pressure Water Supply and Distribution; MWS Drain, Wash and Collection Line 1 & 2; Off-Gas Treatment System; MWS Agent Wash Water Transfer
- APB Decon Storage (SDS) Holding Tanks and Feed Pumps; SDS "A" Sumps; SDS "B" pumps; SDS "C" Pumps
- Munitions Treatment Units #1 and #1; Munition Body Storage Building-Gravity Conveyors
- APB HVAC: Supply Air Handling Units, Battery Room Ventilation System; Cascade Ventilation System, Operator Work Station Ventilation System, Recirculation Units, Unit Heaters and Ventilators; Electrical Room Ventilation System; Entry Support Area Ventilation System; Electrical Room Ventilation System; Entry Support Area Ventilation System
- Agent Monitoring: Agent Filtration Area; Laboratory, APB
- Control Support Building; Medical Building; Laboratory; Utility Building
- APB Agent Collection and Neutralization System—Agent Collection; Agent Neutralization; Hydrolysate Collection System; Hydrolysate Sampling System

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

*Newly added

PCAPP Management Change

PCAPP Site Project Manager Bruce Huenefeld (middle) listens as Bechtel Pueblo Team (BPT) Project Manager Doug Omichinski (right) announces his new assignment as the Bechtel Parsons project manager in Kentucky. The announcement was made at the Feb. 27 Citizens' Advisory Commission meeting. BPT Deputy Project Manager Rick Holmes (left) will be the new BPT project manager, effective May 13.

Training Facility

Citizens' Advisory Commission member Ross Vincent (right) listens to an explanation of the air lock system by Training Specialist Matthew Tom. Ross participated in a tour of the newly opened training facility on Feb. 27.

Explosion Containment Rooms

In one of the Explosion Containment Rooms (ECR), technicians perform data point checks on the Burster Detection Station as part of commissioning activities. The ECRs are located in the Enhanced Reconfiguration Building.

Biotreatment Area

As part of systemization activities, workers check control panels and instrumentation for one of four Immobilized Cell Bioreactors (ICB) modules. Feed and effluent tanks are located in the foreground.

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SAFETY 1942 SERVICE