



Selected Acquisition Report (Proposed)

Program Information

Program (Subprogram if applicable): Chem Demil-ACWA

Effective Date: 12/31/2021

**CLEARED
For Open Publication**

By kempr on Sep 12, 2022

Department of Defense
OFFICE OF PREPUBLICATION AND SECURITY REVIEW



Please note: This form may be used to create a draft Selected Acquisition Report that may be staffed for review and approval. Data still must be entered in a DAVE Program Progress submission. The only data from this form that will be collected is O&S Costs – Disposal and Unitized Costs, Deliveries & Expenditures and LRIP.



*All SAR data in this form must be **UNCLASSIFIED** with no dissemination controls. Do **not** include **CUI** data.*



Program Manager Information

(Name, Phone, Address, etc.)

Mr. Michael S. Abaie, 410-306-4020, 6160 Guardian Gateway, APG, MD 21005, michael.s.abaie.civ@mail.mil

Mission & Description

Chemical Demilitarization-Assembled Chemical Weapons Alternatives (Chem Demil-ACWA) is performing a portion of the chemical warfare materiel elimination mission. In 1996, Congress and the President, responding to public concerns about the safe destruction of chemical weapons, established and later expanded the ACWA program (Public Laws 104-208, 105-261, 106-79, 107-248, 112-239, 114-92, 116-260, and 117-81). The Department of Defense (DoD) was charged with identifying and demonstrating two or more alternative technologies to incineration for the destruction of assembled chemical weapons. The Defense Acquisition Executive assigned Program Manager (PM) ACWA the responsibility for developing neutralization technologies to eliminate the chemical weapons stockpiles located at Pueblo Chemical Depot (PCD), CO, and Blue Grass Army Depot (BGAD), KY (July 16, 2002 and February 3, 2003, respectively). At the time of initiation, the ACWA program was known as the Assembled Chemical Weapons Assessment program. When the assessment phase was complete, the ACWA program shifted its focus from assessing chemical weapons destruction technologies to implementing full-scale pilot testing. As a result, the program was renamed Assembled Chemical Weapons Alternatives in June 2003 to better reflect the new program goals. To raise the program's visibility and obtain the necessary resources, PM ACWA was redesignated as the Program Executive Office (PEO) on October 1, 2012.



Executive Summary

Does Classified Data Exist for this Data Section?

Program Highlights Since Last Report (For Release to Congress):

This December 2021 SAR details changes to cost, schedule, and performance since last reported in the December 2019 SAR for the Chem Demil-ACWA. Chem Demil-ACWA is responsible for the safe destruction of 3,136 tons of mustard and nerve agent stockpiled at the BGAD in Kentucky and the PCD in Colorado. The PEO ACWA is focused on continuing to improve performance at each site and completing destruction of the stockpile by the Chemical Weapons Convention (CWC) Treaty commitment of September 30, 2023. The congressionally-mandated deadline is December 31, 2023.

As of May 13, 2022, the Blue Grass Chemical-Agent Destruction Pilot Plant (BGCAPP) has destroyed 246.7 U.S. tons out of the original stockpile of 523.4 U. S. tons and Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) has destroyed 2,271.3 U.S. tons out of the original stockpile of 2,613.2 U.S. tons. On January 14, 2022, the ACWA program completed destruction of 75 percent of the combined U.S. chemical agent tonnage at BGAD and PCD marking significant progress in the PEO ACWA mission. The ACWA program achieved the 75 percent destruction milestone of all the projectiles at the PCD on February 17, 2022 and two days later, on February 19, 2022, completed 75 percent destruction of the 105mm projectiles at PCAPP. Additionally, the 100 percent destruction of all VX nerve agent in the U.S. chemical stockpile was achieved on April 19, 2022, with the destruction of the last M55 rocket containing VX nerve agent at BGCAPP.

The PEO ACWA continues to follow Centers for Disease Control and Prevention (CDC) and DoD guidance regarding the COVID-19 pandemic to minimize risk to the workforce while remaining committed to the mission. Throughout the pandemic, the PEO ACWA implemented safety protocols and flexible plans for on-site and telework, when applicable, working closely with state and local regulators in Colorado and Kentucky. At the beginning of the pandemic, PEO ACWA worked with the DoD to designate PCAPP, BGCAPP, and Anniston Army Depot Static Detonation Chamber (SDC) employees as Phase 1b for COVID-19 vaccination priority resulting in a high of 87 percent of the workforce being vaccinated. PEO ACWA implemented the Office of Management and Budget (OMB) and DoD Mandatory Coronavirus Disease 2019 Vaccination for DoD Civilian Employees directives, and has modified contracts to comply with applicable directives. PEO ACWA continues to institute numerous safety measures to reduce the risk to the workforce and communities, which include social distancing, employee health screenings, virtual stakeholder meetings, and teleworking. In accordance with DoD guidance released on March 1, 2022, both sites lifted indoor mask mandates. PCAPP and BGCAPP continue to evaluate local conditions and have flexible plans in place to continue the mission safely. PEO ACWA received \$15M for COVID-19 costs incurred via an internal DoD CARES ACT re-programming request in 2020. Despite mitigation efforts, the program is experiencing some impact due to COVID-19 issues, specifically to the supply chain. The PEO ACWA continues to evaluate and monitor the schedule and cost impacts of COVID-19 related events.

The PEO ACWA has modified the systems contracts to codify incentives for the safe and accelerated destruction of the stockpile. The PCAPP Operations Contract period of performance (POP) ends on April 30, 2023. The BGCAPP Operations Contract POP ends on September 30, 2023. The modification for both contracts incorporated the incentive clause in accordance with title 50, United States Code, section 1521(n) that allows the System Contractor (SC) to potentially earn up to \$110 million for accelerating the completion and reducing the actual cost of operations. The National Defense Authorization Act (NDAA) incentive payment, as identified in the contracts, must be generated from contract savings after achieving an accelerated schedule.



History of Significant Developments Since Program Initiation

Date	Description
Sep-1996	Assembled Chemical Weapons Assessment (ACWA) Established (Public Law 104-208)
Apr-1997	The Chemical Weapons Convention (aka chemical weapons treaty) Signed by U.S. and Entered Into Force
Sep-2002	Bechtel Pueblo Team Awarded Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Contract
Oct-2002	ACWA Assigned Responsibility for Destruction of Chemical Agent Stockpiles at Blue Grass Army Depot and Pueblo Chemical Depot (Public Law 107-248)
Jun-2003	Bechtel Parsons Blue Grass Team Awarded Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) Contract
Jun-2003	ACWA Redesignated as Assembled Chemical Weapons Alternatives
Aug-2003	Critical Nunn-McCurdy Breach Reported by ACWA
Jan-2007	ACWA Program Certified to Congress

Add Events



History of Significant Developments Since Program Initiation

Date	Description
Apr-2007	DAE Approved Revised APB
Sep-2010	Significant Nunn-McCurdy Breach Reported by ACWA
Dec-2010	Critical Nunn-McCurdy Breach Reported by USD(AT&L)
Jan-2011	ACWA Program Certified to Congress
Mar-2012	DAE Approved Revised APB
Oct-2012	ACWA Designated as a Program Executive Office (PEO)
Apr-2013	PEO ACWA Decision to use Explosive Destruction System (EDS) at PCAPP
Nov-2013	PEO ACWA Decision to use Static Detonation Chamber (SDC) at BGCAPP

Add Events



History of Significant Developments Since Program Initiation

Date	Description
Mar-2015	PCAPP EDS Overpack Campaign Begins
Mar-2016	PCAPP EDS Overpack Campaign Completed
Sep-2016	PCAPP Main Plant Operations Begin (Mustard HD 155mm Projectiles)
Apr-2017	Significant Nunn-McCurdy Breach Reported
Sep-2017	PCAPP Main Plant Operations Temporary Paused
Jun-2018	PCAPP Main Plant Operations Resume
Jun-2018	PCAPP SDCs Ordered
Jun-2018	PCAPP EDS Reject Campaign Begins

Add Events



History of Significant Developments Since Program Initiation

Date	Description
Dec-2018	PCAPP EDS Reject Campaign Complete
Mar-2019	PEO ACWA Decision to Procure BGCAPP SDC 2000
Jun-2019	BGCAPP EDT Operations Begin (Mustard H 155mm Projectiles)
Jun-2019	PEO ACWA Decision to Revise Rocket Processing Strategy
Jan-2020	BGCAPP Main Plant Operations Begin (Nerve GB 8-inch Projectiles)
May-2020	BGCAPP Main Plant Operations Completed (Nerve GB 8-inch Projectiles)
Jul-2020	PCAPP SDC Construction Completed
Aug-2020	PEO ACWA Decision to not use SCWO and Transport BGCAPP Hydrolysate Offsite

Add Events



History of Significant Developments Since Program Initiation

Date	Description
Sep-2020	PCAPP Main Plant Operations Completed (Mustard HD 155mm Projectiles)
Dec-2020	PCAPP Second Main Plant Campaign Begins (Mustard HD 105mm Projectiles)
Jan-2021	BGCAPP Second Main Plant Campaign Begins (Nerve VX 155mm Projectiles)
May-2021	BGCAPP Second Main Plant Campaign Completed (Nerve VX 155mm Projectiles)
Jul-2021	BGCAPP First Main Plant Rocket Processing System (RPS) Campaign Begins (VX M55 Rockets)
Sep-2021	BGCAPP EDT Operations Completed (Mustard H 155mm Projectiles)
Nov-2021	MDA authorized PEO ACWA to update current 2012 APB
Dec-2021	BGCAP Closure Contract Awarded (Decontamination and Decommissioning)

Add Events



History of Significant Developments Since Program Initiation

Date	Description
Feb-2022	PCAPP SDCs Agent Trial Burns Begin
Mar-2022	MDA approved the revised APB
Apr-2022	BGCAPP First Main Plant Rocket Processing System (RPS) Campaign Completed (VX M55 Rockets)
Apr-2022	PCAPP SDCs Agent Trial Burns Completed

Add Events



Schedule

Does Classified Data Exist for this Data Section?

Schedule Events

Event Title (or Header)	Current Objective	Current Threshold	Current Estimate/Actual Date	Deviation?
BGCAPP - Complete Operations	Sep-2023	Sep-2024	Sep-2023	Yes <input type="checkbox"/>
BGCAPP - Complete Closure	Nov-2026	Nov-2027	Nov-2026	Yes <input type="checkbox"/>
PCAPP - Complete Operations	Sep-2023	Sep-2024	Sep-2023	Yes <input type="checkbox"/>
PCAPP - Complete Closure	Feb-2027	Feb-2028	Feb-2027	Yes <input type="checkbox"/>
				Yes <input type="checkbox"/>
				Yes <input type="checkbox"/>
				Yes <input type="checkbox"/>
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				Yes <input type="checkbox"/>

Add Events



Significant Schedule Risks

(Provide current risks and risks identified at previous key decision points)

Event	Date	Description
Select		
Select		
Select		
Select		
Select		
Select		
Select		
Select		
Select		
Select		
Select		

Schedule Notes:

1. BGCAPP Complete Operations is based on completion of Main Plant Operations and over-packed munitions in the SDC 2000.
2. BGCAPP Complete Closure is based on closure duration of Main Plant and SDC from 2021 POE, excluding Admin Closure.
3. PCAPP Complete Operations is based on completion of Main Plant and SDC Operations.
4. PCAPP Complete Closure is based on closure duration of Main Plant and SDC from 2021 POE, excluding Admin Closure.

Schedule Deviation Explanations:



Performance

Does Classified Data Exist for this Data Section?

Performance Attributes

Current Objective	Current Threshold	Current Estimate	Deviation?	Demonstrated Performance	Date
Attribute Title: Compliance with Environmental Laws and Regulations				KPP <input checked="" type="radio"/> KSA <input type="radio"/> APA <input type="radio"/>	
Meets DoD, State, and/or Federal Requirements	Meets DoD, State, and/or Federal Requirements	Meets DoD, State, and/or Federal Requirements	Yes <input type="checkbox"/>		
Attribute Title: Compliance with Safety and Occupational Health Laws and Regulations				KPP <input checked="" type="radio"/> KSA <input type="radio"/> APA <input type="radio"/>	
Meets DoD, State, and/or Federal Requirements	Meets DoD, State, and/or Federal Requirements	Meets DoD, State, and/or Federal Requirements	Yes <input type="checkbox"/>		
Attribute Title: No Chemical Agent Release				KPP <input checked="" type="radio"/> KSA <input type="radio"/> APA <input type="radio"/>	
0	0	0	Yes <input type="checkbox"/>		

Add Attributes



Performance

Does Classified Data Exist for this Data Section?

Performance Attributes

Current Objective	Current Threshold	Current Estimate	Deviation?	Demonstrated Performance	Date
Attribute Title: No Chemical Agent Exposure				KPP <input checked="" type="radio"/> KSA <input type="radio"/> APA <input type="radio"/>	
0	0	0	Yes <input type="checkbox"/>		
Attribute Title:				KPP <input type="radio"/> KSA <input type="radio"/> APA <input checked="" type="radio"/>	
			Yes <input type="checkbox"/>		
Attribute Title:				KPP <input type="radio"/> KSA <input type="radio"/> APA <input checked="" type="radio"/>	
			Yes <input type="checkbox"/>		

Add Attributes



Performance Notes:

Environmental Laws and Regulations: The facility is operating in compliance with all conditions specified in environmental permits and applicable laws and regulations. The threshold is breached if violation of law or regulation warrants a stop-work order issued by the DoD, the State, the Department of Health and Human Services, or the Environmental Protection Agency and causes a schedule delay of more than 12 months.

Safety and Occupational Health Laws and Regulations: The facility is operating in compliance with the conditions specified in safety and occupational health laws and regulations. The threshold is breached if a violation warrants a stop-work order issued by the DoD, the State, or the Occupational Safety and Health Administration and causes a schedule delay of more than 12 months.

Chemical Agent Release: An event involving chemical agent-destruction pilot plants or Explosive Destruction Technologies (EDTs) where the following occurs:

a. Confirmed chemical agent release above the General Population Limit at the installation boundary measured in accordance with the approved monitoring and/or modeling plan with the pilot plant as the identified source.

b. Confirmed chemical agent release from the pilot plant's exhaust air filter stack above the allowable threshold limit.

Allowable threshold limits are calculated as vapor screening level ceiling values.

Chemical Agent Exposure: Department of the Army Implementation Guidance Policy for Revised Airborne Exposure Limits (June 18, 2004) Appendices A and B, defines a chemical agent exposure as an event when an individual exhibits clinical signs or symptoms of being exposed to chemical agent.

Performance Deviation Explanations:



Acquisition Budget Estimate

Does Classified Data Exist for this Data Section?

Budget Position: **President's Budget (PB)**

Budget Year: 2023

Base Year: 2011

Total Acquisition and Quantity

Appropriation Category (\$Millions)	Objective Base Year	Threshold Base Year	Budget Estimate Base Year	Budget Estimate Then Year	Deviation?
RDT&E	\$ 11,062.9	\$ 12,169.2	\$ 11,059.3	\$ 12,275.6	Yes <input type="checkbox"/>
Procurement	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	Yes <input type="checkbox"/>
MILCON	\$ 1,352.8	\$ 1,488.1	\$ 1,353.3	\$ 1,351.2	Yes <input type="checkbox"/>
Acq O&M	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	Yes <input type="checkbox"/>
Total Acquisition	\$ 12,415.7		\$ 12,412.6	\$ 13,626.8	
PAUC	\$ 3.959		\$ 3.958	\$ 4.345	Yes <input type="checkbox"/>
APUC					Yes <input type="checkbox"/>

Quantity	Current APB	Current Estimate
Development Qty	3,136	3,136
Procurement Qty		



Budget Notes:

Quantity Notes:

The RDT&E quantity reflects tons of chemical agent to be disposed by the Program Executive Office Assembled Chemical Weapons Alternatives. This number is 3,136 US tons and is composed of 2,613 US tons at PCAPP, and 523 US tons at BGCAPP.

Acquisition Cost Deviation Explanations:



Risk and Sensitivity Analysis

Current Procurement Risks	
1	
2	
3	
4	
5	

Current and Original Baseline Risks will be pulled from the appropriate APBs.



Operating and Support Costs – Total Costs

Does Classified Data Exist for this Data Section?

Base Year: 2011

Total Program Operating and Support Estimate Compared with Baseline

	Current Base Year Objective	Current Base Year Threshold	Current Base Year Estimate	Current Then Year Estimate	Deviation?
Total O&S (\$Millions)					Yes <input type="checkbox"/>

Deviation Explanation:

Operating and Support Cost Estimate

(Allocate O&S estimate by each weapon system (or system variants) acquired by the program)

Category (Base Year \$Millions)	System Name:	System Name:	System Name:
Unit-Level Manpower			
Unit Operations			
Maintenance			
Sustaining Support			
Continued System Improvements			
Other			
Total O&S	\$ 0.0	\$ 0.0	\$ 0.0

Cost Estimate Source – O&S

Type: Select

Approval Authority and Date:

Note:



O&S Notes:



Operating and Support Costs – Disposal and Unitized Costs

Annual Unitized Operating and Support Cost Comparison with Antecedent System
(Compare unitized O&S estimate of one system variant acquired by the program with its antecedent system)

Annual Unitized O&S Cost Definition and Calculation Relative to Total O&S Cost:



Please note: Disposal and Unitized Costs are not available for data entry in DAVE Program Progress. Please fill in data on this form and submit to OSD.AcqData@mail.mil

Sustainment Factors	System Name:	Antecedent System Name:
Quantity to Sustain		
Unit of Measure		
Unit Expected Service Life		

Base Year: 2011

Annual Unitized O&S Cost by Category Base Year \$ Unit: \$K	System Name:	Antecedent System Name:
Unit-Level Manpower		
Unit Operations		
Maintenance		
Sustaining Support		
Continued System Improvements		
Other		
Total O&S	\$ 0.0	\$ 0.0

Disposal/Demilitarization Cost Estimate

(Allocate Disposal estimate by each weapon system (or system variants) acquired by the program)

(Base Year \$Millions)	System Name:	System Name:	System Name:
Total Disposal			



Cost Estimate Source – Disposal

Type: Select

Approval Authority and Date:

Note:

Disposal Cost Notes:

Sustainment Strategy:

Antecedent Information:



Please note: Disposal and Unitized Costs are not available for data entry in DAVE Program Progress. Please fill in data on this form and submit to OSD.AcqData@mail.mil



Unit Cost

Current Baseline Compared with Current Estimate

Current Baseline Base Year: 2011

Category (\$M)	Current Baseline	Current Estimate	% Change	Breach? Significant or Critical
Program Acquisition Unit Cost				
Acquisition Cost	\$ 12,415.7	\$ 12,412.6		
Program Quantity				
PAUC	\$ 3.959	\$ 3.958	-0.02%	None
Average Procurement Unit Cost				
Procurement Cost	\$ 0.0	\$ 0.0		
Procurement Quantity				
APUC			0.00%	None

Original Baseline Compared with Current Estimate

Original Baseline Base Year:

Category (\$M)	Original Baseline	Current Estimate	% Change	Breach? Significant or Critical
Program Acquisition Unit Cost				
Acquisition Cost				
Program Quantity				
PAUC			0.00%	None
Average Procurement Unit Cost				
Procurement Cost				
Procurement Quantity				
APUC			0.00%	None



Critical Cost Growth Details

Current Baseline PAUC Breach Explanation (if applicable):

Original Baseline PAUC Breach Explanation (if applicable):

Current Baseline APUC Breach Explanation (if applicable):

Original Baseline APUC Breach Explanation (if applicable):



Impacts of Schedule Changes on Unit Cost:

Actions Taken or Proposed to Control Future Cost Growth:

Unit Cost Notes:



Technologies and Systems Engineering

Does Classified Data Exist for this Data Section?

Significant Technical Risks

(Provide current risks and risks identified at previous key decision points)

Event	Date	Description
Select		
Select		
Select		
Select		
Select		

Add Risks



Contracts

External Government Activities

Activity Title					
Supported Phase	Development	CAGE Code		City	
Work Start Date		CAGE Legal Name		State/Province	
Notes					

Activity Title					
Supported Phase	Development	CAGE Code		City	
Work Start Date		CAGE Legal Name		State/Province	
Notes					

Activity Title					
Supported Phase	Development	CAGE Code		City	
Work Start Date		CAGE Legal Name		State/Province	
Notes					



Contracts and Efforts

Contract Number		Order Number		Contract Title	
CAGE Code		City		Contracting Office	
CAGE Legal Name		State/Province		Contract Strategy	Select
Effort Number					
Supported Phase	Development	Latest Modification Number		Definitization Date	
Contract Type	Select	Latest Modification Date		Work Start Date	
Technical Data Rights	None	Notes			
Contract/Effort Price, Quantity and Performance (\$M)					
Initial Target Price		Current Target Price		Contractor's EAC	
Initial Ceiling Price		Current Ceiling Price		PM's EAC	
Initial Quantity		BAC		BCWP	Work Completed 0.00%
Current Quantity		ACWP		BCWS	Cost Variance
Delivered Quantity					Schedule Variance

Factors Contributing to Cost Variance and Projected Effects on Program Costs:

Factors Contributing to Schedule Variance and Projected Effects on Program Schedule:

Add Contract



Deliveries & Expenditures


Quantities	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development			3,136	0.00%
Procurement				0.00%
Total			3,136	0.00%

Please note **Percent Delivered** is for display purposes only. It uses Current Estimate Quantities from this form. Current Estimate Quantities (pulled from DAVE—not this form) and values from this table will be used to calculate this percentage in Advana.

Years Appropriated to date:

Total Years Appropriated Funding (Current Baseline):

Percent Years Appropriated: 0.00%



Please note: Deliveries & Expenditures is not available for data entry in DAVE Program Progress. Please fill in data on this form and submit to OSD.AcqData@mail.mil

Appropriation Category (\$Millions)	Then Year Appropriated Amount	Then Year Expended Amount
RDT&E		
Procurement		
MILCON		
Acq O&M		
Percent Appropriated/Expended	0.00%	0.00%

Please note **Percent Appropriated/Expended** is for display purposes only. It uses Total Acquisition Cost from this form. Total Acquisition Cost (pulled from DAVE—not this form) and values from this table will be used to calculate this percentage in Advana.

Deliveries & Expenditures Notes:



Low Rate Initial Production

	Initial Decision LRIP	Current Total LRIP
Approval Date		
Approval LRIP Quantity		
Approval Document Title		
Start Year		
End Year		

Rationale if quantity exceeds 10% of the total number of articles to be produced:

Quantity Note:



Please note: LRIP is not available for data entry in DAVE Program Progress. Please fill in data on this form and submit to OSD.AcqData@mail.mil