Assembled Chemical Weapons Alternatives Update

U.S. Army Element, Assembled Chemical Weapons Alternatives

29 September 2010

Presented to:

Colorado Chemical Demilitarization Citizens' Advisory Commission

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Agenda

- Environmental Assessment (EA) for Explosive Destruction Technology (EDT) Status
- New EA
- EDT Path Forward
- Environmental Modeling for Overpacked/Rejected Munitions
- Environmental Modeling for Two Options
- Information and Online Program Resources
- Questions

EA for EDT Status

- A new EA is being initiated to analyze using an EDT at Pueblo Chemical Depot
  - To destroy:
    - Overpacked and reject munitions
    - One category of munitions that may reduce handling and worker risk: boxed 105mm projectiles with M57 fuze
    - Explosive components of munitions currently scheduled to be treated off-site
  - To be performed by Oak Ridge National Laboratory with a target completion of Fall 2011
  - To supplement the 2002 Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Final Environmental Impact Statement, which initially addressed the requirement for an EDT at PCAPP
  - To address stakeholder comments from the previous EA, including those from EPA Region 8

New EA

- New EA will include:
  - The Army's Explosive Destruction System
  - A selected commercial EDT
  - A "no action" option
  - Environmental modeling requested by EPA Region 8

Army Explosive Destruction System (EDS)

Commercial
Explosive Destruction Technologies (EDT)

Static Detonation Chamber (SDC)

Transportable Detonation Chamber (TDC)

Detonation of Ammunition in a Vacuum-Integrated Chamber (DAVINCH)

EDT Path Forward

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Fall 2010	Proceed with implementation of baseline EDT; withdraw current Environmental Assessment
	Award contract to Oak Ridge National Lab for preparation of new Environmental Assessment required to meet updated "purpose and needs"
	Bechtel to reissue Request for Proposal based on new scope
Winter 2010	Vendor proposals submitted; vendor briefings to Bechtel and CAC
	Commercial EDT selected
Spring 2011	EDT vendor provides data needed to address EPA Region 8 data requirements
Fall 2011	New Environmental Assessment with draft "Finding of No Significant Impact" issued for public comment
Winter 2011	Final "Finding of No Significant Impact" issued; Acquisition Decision Memorandum signed
	Submit Resource Conservation and Recovery Act (RCRA) permit application
	EDT vendor released to fabricate EDT; submit RCRA permit application
Winter 2012	RCRA permit approved (permit in effect); site construction commences
Spring 2014	EDT construction/systemization complete
Summer 2014	EDT approved to begin operations

Environmental Modeling for Overpacked/Rejected Munitions

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105mm projectiles:	4,250*
4.2" mortars:	1,170*
155mm projectiles:	3,400*
Treaty-sampled munitions:	400*
Total:	9,220*

- Environmental modeling will be conducted to develop data associated with processing overpacked munitions and anticipated rejects
- Estimated number of overpacked munitions has increased as a result of continued aging of the stockpile
- Estimated number of rejects adjusted to 1% of the stockpile based on lessons learned from the Linear Projectile/Mortar Disassembly (LPMD) System testing at Anniston and stockpile condition assessments

**Figures are planning numbers for modeling purposes only*

Environmental Modeling for Two Options

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- In addition to the overpacks/rejects, additional modeling data is needed to take into consideration two other process feed types, based on determination of risk and safety impacts:
  - 28,375 boxed 105mm projectiles with M57 fuze
  - Explosive Components from all munitions processed in the PCAPP (105mm projectile fuzes & bursters, 4.2” mortar fuzes & bursters, 155mm bursters (non-fuzed), 105mm bursters (non-fuzed), 105mm propellant, 4.2” mortar propellant)

*Figures are planning numbers for modeling purposes only

EDT Information Sources

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- All past and present information on EDT can easily be found from the home page of the ACWA website
- **www.pmacwa.army.mil**

Your resource for program information:

www.pmacwa.army.mil

ACWA Facebook Page
www.facebook.com/pmacwa

ACWA Twitter Page
www.twitter.com/acwanews

ACWA YouTube Channel
www.youtube.com/usaeacwa

ACWA Flickr Photostream
www.flickr.com/photos/acwa

ACWA RSS Feed
www.pmacwa.army.mil/connect/acwa_rss.html

Questions/Discussion

Back Up Slides

Base Case:
(Overpacked & Reject Munitions)*

105mm projectiles:	4,250
4.2" mortars:	1,170
155mm projectiles:	3,400
Treaty-sampled munitions:	400
Total:	9,220

*NOTE: Estimated number of overpacked munitions may increase as a result of continued aging of the stockpile; estimated number of reject munitions is expected to increase based on worst case numbers from LPMD testing

Boxed Projectiles with M57 Fuze

105mm projectiles: 28,375

Explosive Components

(All explosive components not destroyed as part of Base Case)

105mm projectile fuzes & bursters: 28,375
(some of which may be included in the Base Case & assumes ACWA does not implement Option 1)

4.2“ mortar fuzes & bursters: 95,936
(excludes Base Case)

155mm bursters (non-fuzed): 296,154
(excludes Base Case)

105mm bursters (non-fuzed): 355,043
(some of which may be included in the Base Case)

105mm propellant: 78,031 lbs

4.2" mortar propellant: 60,011 lbs