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**A Partnership for Safe Chemical Weapons Destruction**



www.peoacwa.army.mil

## **Environmental Assessment of Proposed Installation and Operation of Explosive Destruction Technology Facility at U.S. Army Pueblo Chemical Depot**

The Assembled Chemical Weapons Alternatives (ACWA) program is currently constructing the Pueblo Chemical Agent-Destruction Pilot Plant, or PCAPP, to safely and efficiently destroy a stockpile of chemical weapons currently in storage at the U.S. Army Pueblo Chemical Depot (PCD). Although this highly-automated, state-of-the-art facility will be able to destroy most of the 2,613 tons of mustard agent contained in the stockpile, there are a limited number of munitions that will not be able to process through the plant. These problematic munitions include those that have leaked in the past, and are now “overpacked” as well as rejects whose condition does not allow for automated processing. To resolve this issue, ACWA is considering the use of Explosive Destruction Technology (EDT) to augment the plant’s neutralization/biotreatment operations.

To meet the requirements of the National Environmental Policy Act (NEPA) and Title 32 Code of Federal Regulations Part 651, the U.S. Army conducted an Environmental Assessment (EA) to evaluate the potential environmental impacts of installing and operating an EDT facility at PCD for the destruction of:

- Overpacked mustard-filled chemical munitions that have leaked in the past and are currently in storage
- Anticipated reject munitions
- Explosive components and associated wastes

The areas of environmental analysis examined in the EA include land use, air quality, water resources, human health and safety, ecological resources, socioeconomic resources, environmental justice, noise, waste management and resource consumption. The EA concluded that the installation of an EDT facility will have no significant environmental impacts. As per the NEPA process, a draft Finding of No Significant Impact has been prepared and is available for public comment.

Interested stakeholders can access copies of the EA, as well as the draft Finding of No Significant Impact at information repositories located throughout the Pueblo area, the ACWA website at [www.peoacwa.army.mil](http://www.peoacwa.army.mil), or at the Pueblo Chemical Stockpile Outreach Office.

**Public Comment Period:**

The public comment period on the draft Finding of No Significant Impact begins April 9 and concludes May 8, 2012.

Copies of the EA and draft Finding of No Significant Impact may be viewed and/or downloaded from the ACWA website at [www.peoacwa.army.mil](http://www.peoacwa.army.mil). Please reference the “Guide to Navigating the EA” found on page 3 of this fact sheet.

Copies of the EA and supporting documentation may also be viewed at the following information locations:

- **Robert Hoag Rawlings Public Library**, 100 East Abriendo Avenue, Pueblo, CO
- **McHarg Park Community Center**, 405 2nd Lane, Avondale, CO
- **Boone Community Center**, 421 East First Street, Boone, CO
- **Pueblo Chemical Stockpile Outreach Office**, 104 West B Street, Pueblo, CO

## Environmental Assessment of Proposed Installation and Operation of Explosive Destruction Technology Facility at U.S. Army Pueblo Chemical Depot (continued)

**PUBLIC MEETING:** A public meeting is scheduled for April 24, 2012 from 6–8 p.m. at the Olde Towne Carriage House, 102 S. Victoria Ave., in Pueblo. The meeting will begin with formal presentations, followed by an informal poster session. Public comment forms will be available and accepted at the meeting.

**Comments on the draft Finding of No Significant Impact should be submitted to:**

USAE ACWA  
5183 Blackhawk Road  
ATTN: AMSAW-RM  
Aberdeen Proving Ground, MD 21010-5424  
E-mail: [osd.APG.usamc.mbx.acwa-hq-environmental@mail.mil](mailto:osd.APG.usamc.mbx.acwa-hq-environmental@mail.mil)  
Fax: (410) 436-6026  
Website: [www.peoacwa.army.mil](http://www.peoacwa.army.mil)

**ADDITIONAL PUBLIC MEETINGS**

Citizens' Advisory Commission Meeting  
April 25, 2012 at 6 p.m.  
McHarg Park Community Center,  
405 2nd Lane, in Avondale

Citizens' Advisory Commission Public Meetings with Explosive Destruction Technology Vendors  
May 2, 2012, 4 - 6 p.m. and 7 - 9 p.m.  
Olde Towne Carriage House  
102 S. Victoria Ave., in Pueblo

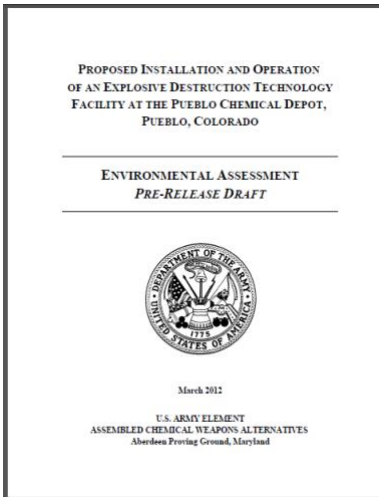
**FOR MORE INFORMATION:** Call the Pueblo Chemical Stockpile Outreach Office at (719) 546-0400 or visit [www.peoacwa.army.mil](http://www.peoacwa.army.mil)

*Note: In February 2010, ACWA, in conjunction with PCD, published an EA on the analysis of alternatives (including the use of EDT) that could accelerate the chemical munitions destruction operations at the PCD. The 2010 EA also considered an expanded use of EDT. After due consideration of many factors, including comments received from Colorado stakeholders during the public comment period, the Department of Defense elected to withdraw the 2010 EA and, to focus instead on the use of EDT for destroying the problematic munitions and the explosive components removed from munitions. The EA released in April 2012 is a result of these actions.*

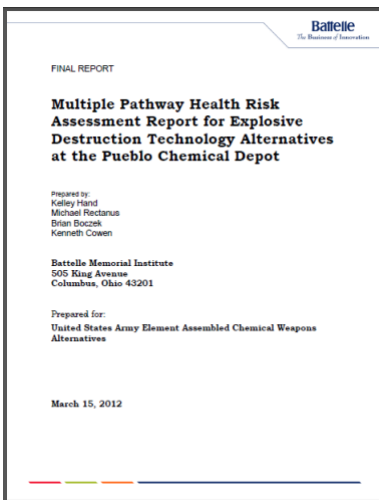
## Navigating the Environmental Assessment (EA)

The following provides a tool to help navigate the EA, as well as a key supporting document, the Multiple Pathway Health Risk Assessment, or MPHRA. Both documents are available on the ACWA website at [www.peocwa.army.mil](http://www.peocwa.army.mil) and at community information repositories as listed on page 1.

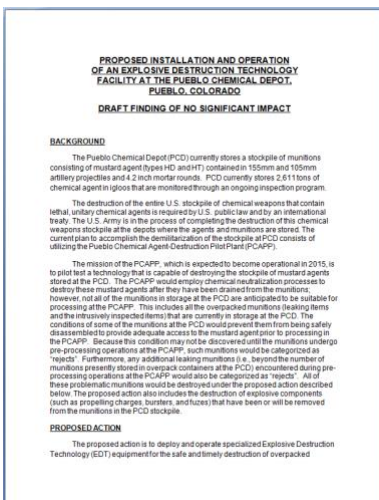
## Overview of Documents



- 1) The **Environmental Assessment (EA)** evaluates the environmental effects of the proposed action (installation and operation of an Explosive Destruction Technology (EDT) at the Pueblo Chemical Depot (PCD)). It contains approximately 190 pages made up of 6 sections and 3 Appendices.

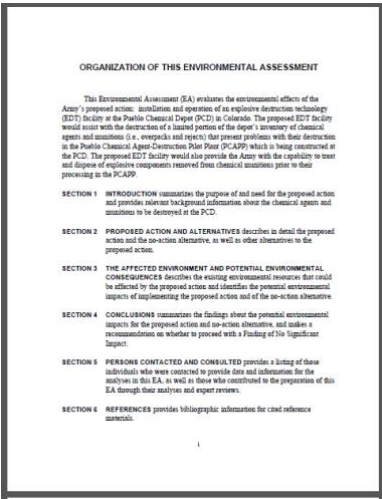


- 2) Supporting documentation includes the **Multiple Pathway Health Risk Assessment (MPHRA)** which assesses the health risks associated with the operations of an EDT at PCD. Information from the MPHRA was used to develop the EA. The MPHRA contains approximately 850 pages consisting of 8 sections and 7 Appendices.

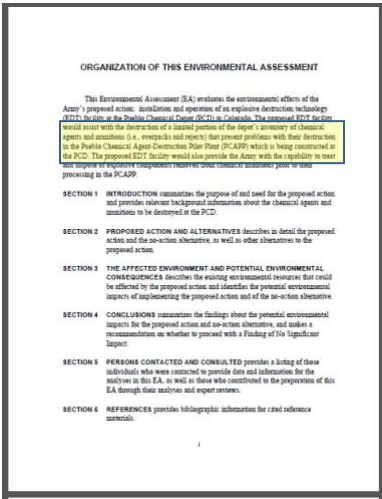


- 3) The EA package also contains the draft **Finding of No Significant Impact (FNSI)**. The draft FNSI presents the conclusion of the EA that there are no significant impacts from the proposed action. The draft FNSI is a 3 page document.

# Environmental Assessment of Proposed Installation and Operation of Explosive Destruction Technology Facility at U.S. Army Pueblo Chemical Depot (continued)



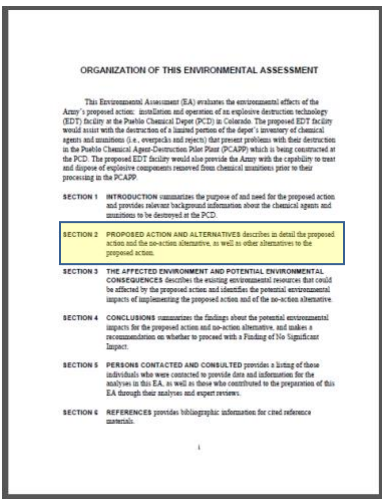
When reviewing the EA, the first place to look is page i. This page includes a short description of what is contained in each section of the EA. The next several pages of this fact sheet will provide a description of each of those sections and highlight where you can find key information you may be interested in.



**SECTION 1 – INTRODUCTION:** Summarizes the purpose of and need for the proposed action and provides relevant background information about the chemical agents and munitions to be destroyed at the PCD.

### Key Areas:

- 1.1.1 (The PCD Inventory of Mustard-Filled Munitions) – Describes the potential feed materials to be processed through an EDT
- 1.2 (Overview of Proposed Action) and 1.3 (Purpose and Need for the Proposed Action) – Describe the intent to use an EDT and provide the rationale for that intent
- 1.4.1 (Framework) and 1.4.2 (Approach) – Provide a clear description of how the analysis was conducted



**SECTION 2 - PROPOSED ACTION AND ALTERNATIVES:** Describes in detail the proposed action and the no-action alternative, as well as other alternatives to the proposed action.

### Key Areas:

This section provides more details for each of the alternatives being considered, i.e., the different EDT systems. There are photos of each system as well as a detailed description. These systems consist of:

- Static Detonation Chamber (SDC) on page 2-3
- Transportable Detonation Chamber (TDC) on page 2-7
- Detonation of Ammunition in Vacuum Integrated Chamber (DAVINCH) on page 2-10
- Explosive Destruction System (EDS) on page 2-12

# Environmental Assessment of Proposed Installation and Operation of Explosive Destruction Technology Facility at U.S. Army Pueblo Chemical Depot (continued)

## ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

This Environmental Assessment (EA) evaluates the environmental effects of the Army's proposed action: installation and operation of an explosive destruction technology (EDT) facility at the Pueblo Chemical Depot (PCD) in Colorado. The proposed EDT facility would assist with the destruction of a limited portion of the depot's inventory of chemical agents and munitions (i.e., overpacks and munitions) that present problems with their destruction in the Pueblo Chemical Agent Destruction Pilot Plant (PCAPP) which is being constructed at the PCD. The proposed EDT facility would also provide the Army with the capability to treat and dispose of explosive components removed from chemical munitions prior to their processing in the PCAPP.

- SECTION 1 INTRODUCTION summarizes the purpose of and need for the proposed action and provides relevant background information about the chemical agents and munitions to be destroyed at the PCD.
- SECTION 2 PROPOSED ACTION AND ALTERNATIVES describes in detail the proposed action and the no-action alternative, as well as other alternatives to the proposed action.
- SECTION 3 THE AFFECTED ENVIRONMENT AND POTENTIAL ENVIRONMENTAL CONSEQUENCES describes the existing environmental resources that could be affected by the proposed action and identifies the potential environmental impacts of implementing the proposed action and of the no-action alternative.
- SECTION 4 CONCLUSIONS summarize the findings about the potential environmental impacts for the proposed action and no-action alternative, and make a recommendation on whether to proceed with a Finding of No Significant Impact.
- SECTION 5 PERSONS CONTACTED AND CONSULTED provides a listing of those individuals who were contacted to provide data and information for the analyses in this EA, as well as those who contributed to the preparation of this EA through their analyses and expert reviews.
- SECTION 6 REFERENCES provides bibliographic information for cited reference materials.

## SECTION 3 - THE AFFECTED ENVIRONMENT AND POTENTIAL ENVIRONMENTAL CONSEQUENCES:

Describes the existing environmental resources that could be affected by the proposed action and identifies the potential environmental impacts of implementing the proposed action and of the no-action alternative.

### Key Areas:

This section can be used as a resource to understand all the areas that were considered for potential impacts. If further explanation of the conclusions in any of those areas of analysis summarized in Section 4 is desired, refer to this section for that detail.

## ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

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**SECTION 4 – CONCLUSIONS:** Summarizes the findings about the potential environmental impacts for the proposed action and no-action alternative, and makes a recommendation on whether to proceed with a Finding of No Significant Impact.

### Key Areas:

**\*This section is the key section for the entire document.** It is 14 pages long and summarizes the impacts for the proposed action in 16 areas of analysis to include: Land Use, Air Quality, Surface Water Resources, etc. These summaries are all presented separately to allow you to focus on those specific areas that are of most interest to you. Most are short and concise to provide an immediate impression of the impacts.

## ORGANIZATION OF THIS ENVIRONMENTAL ASSESSMENT

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**SECTION 6 – REFERENCES:** Provides bibliographic information for cited reference materials.

**APPENDICES:** Summary of comments received from withdrawn EA; Army correspondence with agencies associated with cultural resources; EDT emission parameters.

### Key Areas:

See above.

Navigating the Multiple Pathway Health Risk Assessment

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The Executive Summary (page ES-1) is a good place to start to review the methodology used in conducting the MPHRA and a review of the results of the assessment. The MPHRA also contains a table of contents that lists the information available in each section of the document in order to locate any particular area of interest.

**Key Areas:**

Section 7.6 (Summary and Cumulative EDT and PCAPP Risk and Health Effects) – provides a summary of the carcinogenic, non-carcinogenic hazards and acute hazards to includes baseline results from the PCAPP MPHRA with a comparison of total impacts to CDPHE acceptable levels.

Section 7.7 (Uncertainty Analysis of Risk Characterization) – explains potential sources of uncertainty that may impact the results of the MPHRA.