

RECOVERED CHEMICAL MATERIEL DIRECTORATE FACT SHEET

RCMD OPERATIONS AT PUEBLO CHEMICAL DEPOT (PCD)

The U.S. Army Recovered Chemical Materiel Directorate's (RCMD) technology and expertise played a critical role in the mission to destroy problematic chemical weapons in the stockpile at Pueblo Chemical Depot (PCD). RCMD will return to PCD to treat any munitions that may be recovered from burial sites during ongoing U.S. Army Corps of Engineers (USACE) environmental remediation activities.

In 1997, the United States ratified the Chemical Weapons Convention, an international treaty prohibiting development and use of chemical weapons and mandating their destruction. PCD originally housed more than 2,600 tons of mustard agent in approximately 780,000 munitions, about 8% of the nation's original declared chemical stockpile.

The Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) is the Department of Defense program responsible for the destruction of chemical weapons in Colorado. Working in partnership with the community, the Army selected neutralization followed by biotreatment to destroy the PCD chemical weapons stockpile. In 2012, construction was completed on the



In 2013, PEO ACWA announced selection of the EDS, designed and owned by RCMD, to destroy problematic munitions prior to the start of PCAPP operations.



The first PCAPP EDS campaign, from March 2015 to February 2016, resulted in the safe destruction of 549 munitions and 11 DOT bottles.

Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP), which uses an automated process to destroy the munitions stored at PCD.

The condition of some munitions at PCD posed a problem for the PCAPP automated process, making it necessary to select an additional destruction method to augment PCAPP. In April 2013, PEO ACWA announced selection of the Explosive Destruction System (EDS), designed and owned by RCMD, to destroy approximately 1,800 problematic items.

The EDS uses cutting charges to explosively access the chemical agent inside the munition and eliminate its explosive components. Operators then add neutralization chemicals to eliminate the chemical agent. The system's main component – a sealed, stainless-steel vessel – contains all blast, vapor and fragments from the process. Treatment is confirmed by sampling residual liquid and air from the vessel prior to reopening the EDS.



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RCMD OPERATIONS AT PCD (CONTINUED)

Stockpile destruction operations began in March 2015, when the PCAPP EDS destroyed a single Department of Transportation (DOT) bottle. This marked the beginning of a successful campaign that ended in February 2016 and resulted in the safe destruction of 549 munitions and 11 DOT bottles. The first PCAPP EDS campaign was followed by the start of destruction operations at the PCAPP main plant in September 2016.

PCAPP EDS began its second campaign in June 2018 and successfully completed the mission in December 2018. A total of 369 problematic stockpile munitions and an additional 22 recovered munitions were destroyed.

The U.S. Army Corps of Engineers is engaged in ongoing environmental remediation of known burial sites at PCD – known collectively as Solid Waste Management Unit Sites 12 and 13 – with the goal of returning the land to public use. RCMD will return to PCD to destroy chemical munitions that may be recovered during these remediation efforts.



Construction of the PCAPP EDS began in early 2014. The sites included two environmental enclosures (1) for the EDS and the permitting of igloos (2) to safely store the munitions pending destruction.



The EDS environmental enclosures protect operators and equipment from the weather and protect the environment from vapor releases. Redundant air-filtration systems (3) remove airborne contamination from EDS operations.



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