

SINGLE CAIS ACCESS AND NEUTRALIZATION SYSTEM (SCANS)



The Single CAIS Access and Neutralization System

U.S. Army Chemical Materials Activity Recovered Chemical Materiel Directorate (CMA RCMD) uses the Single CAIS Access and Neutralization System, a hand-held chemical treatment container, to access and treat Chemical Agent Identification Set bottles containing the chemical agent mustard (H).

CAIS items include glass ampoules, vials and bottles that contain four ounces or less of chemical agents or industrial chemicals. The Army manufactured and distributed CAIS items to military installations around the country between 1928 and 1969 to train Soldiers in the safe identification, handling and decontamination of chemical agents. Many CAIS items were buried, an acceptable practice until the 1970s. The Army has been directed to destroy CAIS, assigning this mission to CMA RCMD.

The Army expects to continue recovering CAIS items through ongoing environmental remediation activities. CAIS items containing diluted agent or industrial chemicals in glass ampoules and vials are packaged and processed as hazardous waste. Only CAIS bottles which contain concentrated mustard agent are treated using the SCANS.



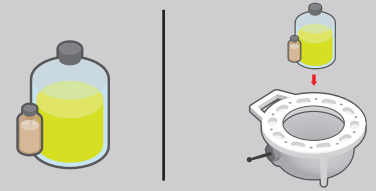
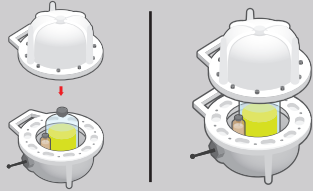
The U.S. Army has been directed to destroy CAIS, many of which were buried – an acceptable disposal practice until the 1970s. Pictured, a K-941 bottle containing concentrated mustard.

REV: 20250723

SCANS OPERATIONS

1

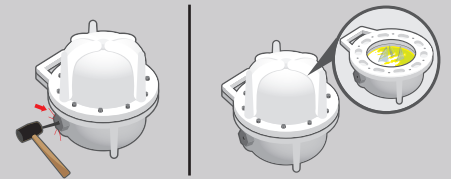
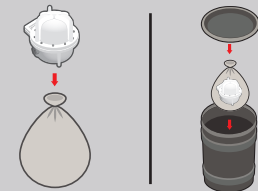
To begin treatment, a SCANS operator places a single CAIS glass bottle inside the container adjacent to a four-liter (approximately one gallon) glass jar containing neutralization chemicals, which operators mix on site.


2


Operators seal the SCANS by securing the access lid.

3

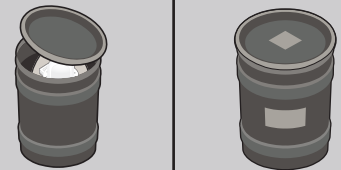
The operator hits the breaker bar with a hammer, shattering the jar containing neutralization chemicals and the CAIS bottle. This allows the mixing of agent and neutralant in the sealed container. The neutralant and associated products remain completely contained within the SCANS.


4


Operators overpack the SCANS into a larger container meeting U.S. Department of Transportation requirements for the transport of hazardous waste.

5

Finally, operators label the overpacked SCANS and ship it to a permitted facility for final treatment and disposal.



SCANS OVERVIEW

SCANS missions to date: 8
 CAIS items treated using SCANS: 75

MISSION SITES & ITEMS DESTROYED

Former Fort McClellan, AL **(1 item)**
 Holloman AFB, NM **(8 items)**
 Fort Benning, GA **(38 items)**
 Former Fort McClellan, AL **(1 item)**
 Fort Bragg, NC **(24 items)**
 Redstone Arsenal, AL **(1 item)**
 Former Williams AFB, AZ **(1 item)**
 Yuma Proving Ground, AZ **(1 item)**