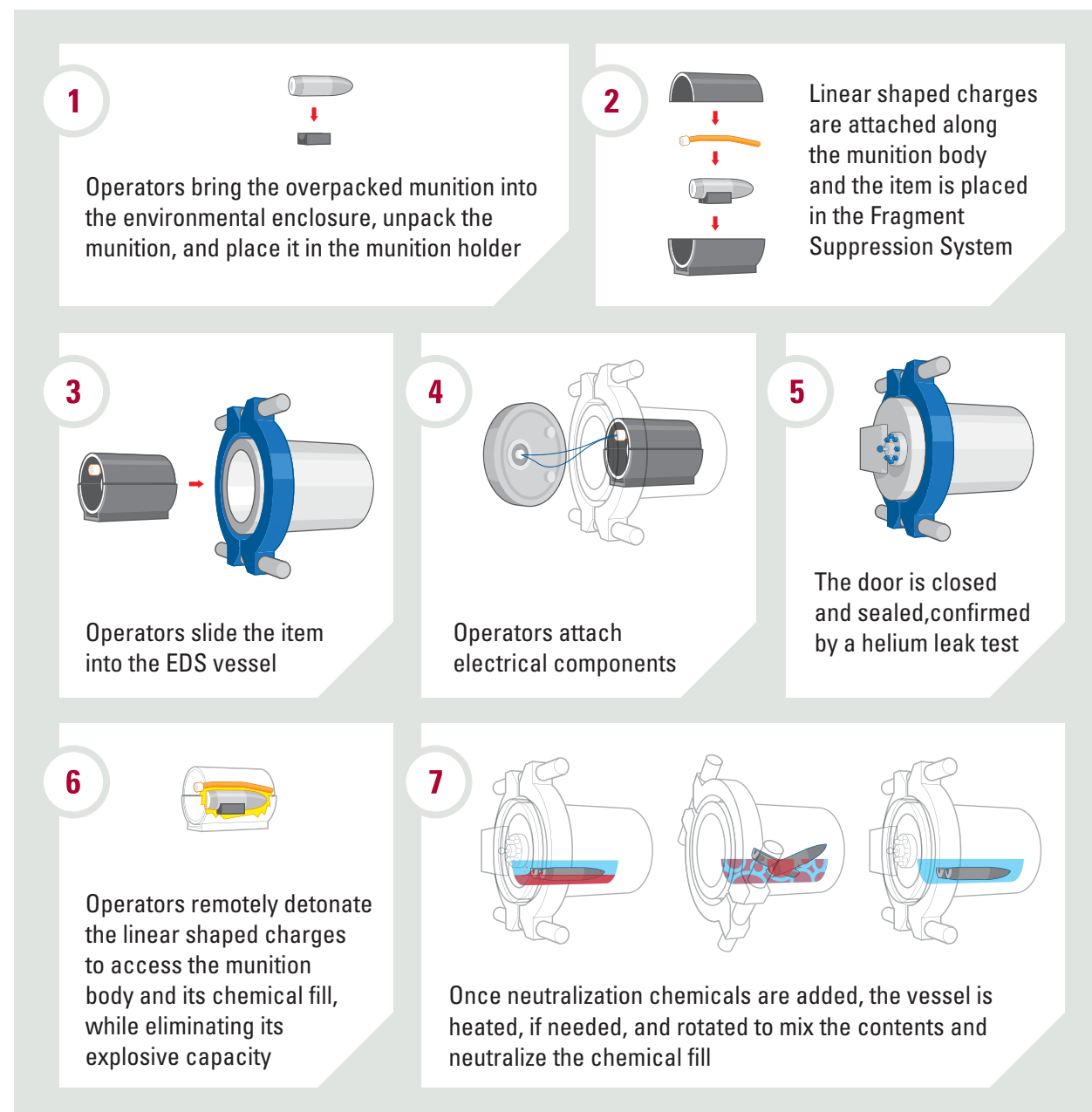


## Explosive Destruction System Overview (continued)

### HOW DOES THE EDS WORK?



## Explosive Destruction System Overview



The Explosive Destruction System destroys recovered chemical warfare materiel while protecting workers and the environment.

The U.S. Army Chemical Materials Agency's (CMA) Non-Stockpile Chemical Materiel Project (NSCMP) provides centralized management and direction to the Department of Defense for the assessment and disposal of recovered chemical warfare materiel in a safe and environmentally sound manner.

NSCMP designed the Explosive Destruction System (EDS) with Sandia National Laboratories to provide on-site treatment of chemical warfare materiel in a safe, environmentally sound manner. The EDS remains an innovative alternative to the open detonation of explosively configured munitions that supports both planned and quick-response munition recovery operations.

The EDS uses cutting charges to explosively access chemical munitions, eliminating their explosive capacity before neutralizing the chemical agent. The system's main component, a sealed, stainless vessel, contains all the blast, vapor and fragments from the process. Treatment is confirmed by sampling residual liquid and air from the vessel prior to reopening the EDS.

The success of the EDS 1 led to development of the EDS 2, constructed to contain larger materiel in both size and explosive content. The EDS 2 handles the same items as the EDS 1, plus 155 mm and 8-inch projectiles. Both systems, mounted on trailers, easily transport where needed.

For more information, contact the CMA Public Affairs Office at (410) 436-3629 (800) 488-0648

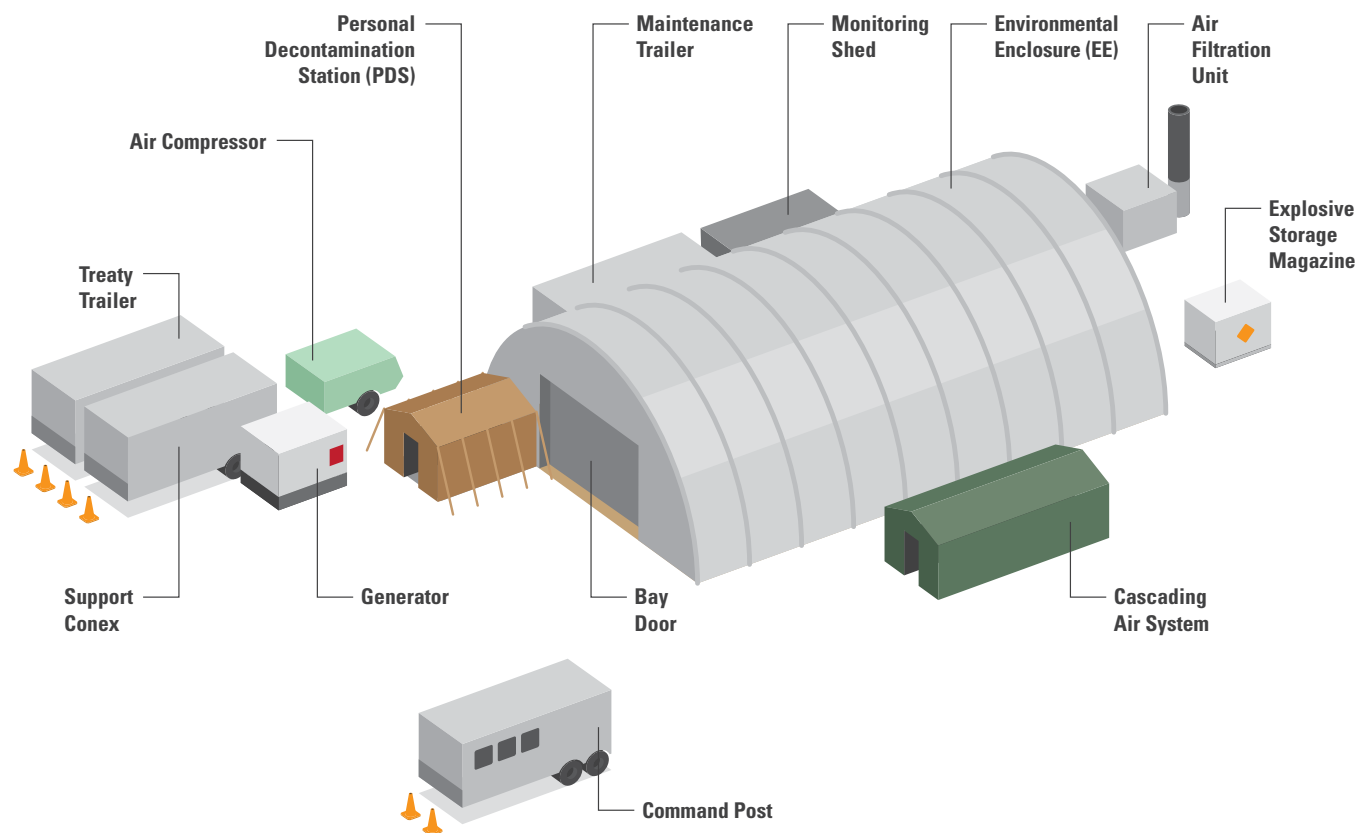
### QUICK FACTS

- Maintains five transportable EDS units; two Phase 1 and three Phase 2
- Phase 1 weighs 32,000 lbs with an explosive rating of 1.5 lbs (TNT Equivalent)
- Phase 2 weighs 68,000 lbs with an explosive rating of 4.8 lbs (TNT Equivalent)
- Phase 1 processes three items at once including: 4.2-inch mortars, 75 mm artillery shells, live projectiles and bomblets.
- Phase 2 processes six items at once including: 4.2-inch mortars, 75 mm artillery shells, 105 mm projectiles, 155 mm projectiles and 8-inch projectiles.
- Both EDS vessels treat Mustard, Phosgene, G-series agents, VX, Lewisite, Cyanogen Chloride, Hydrogen Cyanide, and Chloropicrin.
- Successfully completed missions at Aberdeen Proving Ground, Md., Spring Valley, Washington, D.C., Dover Air Force Base, Del., Former Camp Sibert, Ala., Pine Bluff Arsenal, Ark., Rocky Mountain Arsenal, Colo., and Redstone Arsenal, Ala. Testing for the EDS was conducted at Porton Down, United Kingdom and Aberdeen Proving Ground, Md.
- More than 1700 items treated in full compliance with all safety and environmental regulatory requirements.

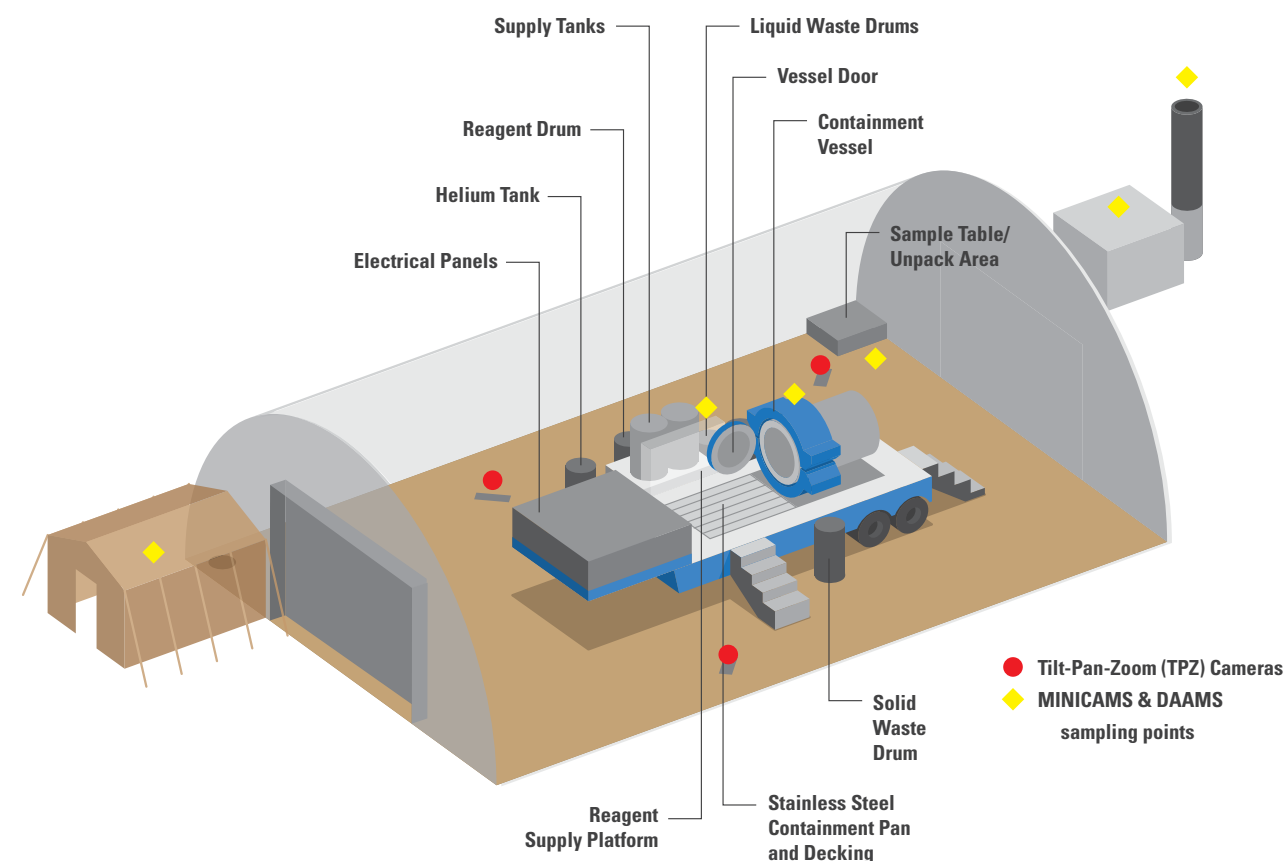
OVER ►

## Explosive Destruction System Overview (continued)

### TYPICAL EDS SITE LAYOUT: EXTERIOR



### TYPICAL EDS SITE LAYOUT: INTERIOR



**THE EDS SITE LAYOUT**, set up in accordance with all applicable laws/permit requirements, ensures the overall safety of the workers and the environment. The EDS vessel contains all the blast, vapor and fragments from the process and continuous air monitoring is conducted at every EDS site to ensure complete protection. NSCMP takes all precautions during operations seriously, as safety remains NSCMP's top priority.

TOTAL MUNITIONS DESTROYED**	
As of 5-Mar-12	
MUNITION TYPE	NSCMP QUANTITY
Mortars	818
Projectiles	122
Rockets (German Traktor)	474
Bombs	10
Bomblets	11
Cylinders	2
Bottles	156
Other	5
<b>Total</b>	<b>1,608</b>

\*\*Does not include 181 SETH items completed during testing

FILL	# ITEMS
Phosgene (CG)	45
Mustards (HD, HN3)	564
Lewisite/Arsenicals	160
Other Agents	128
No Key Element (Empty)	711
	<b>1,608</b>