



## U.S. ARMY CHEMICAL MATERIALS AGENCY

### Mobile Munitions Assessment System

The U.S. Army Non-Stockpile Chemical Materiel Project (NSCMP) developed the Mobile Munitions Assessment System (MMAS) to provide analysis of recovered items with unknown fills. MMAS uses non-intrusive assessment equipment to rapidly provide detailed information on recovered items and distribute that information to appropriate authorities, reducing risk to the public, military and emergency personnel.

Unexploded or buried munitions may be found on test ranges and at munition burial sites. When recovered, the contents of these items may not be easily identifiable. MMAS can travel to the site, rapidly identify the contents and condition of recovered items, and provide detailed analysis with minimal handling.

#### KEY MMAS TOOLS ARE:

- **Portable Isotopic Neutron Spectroscopy System:** PINS accurately detects the presence of chemical elements using neutron particles to produce a unique energy spectrum given off by chemicals inside a munition.
- **Digital Radiography and Computed Tomography:** DRCT uses X-ray photography to produce high-quality images of an item's interior to show if the munition contains a liquid fill and explosive potential.
- **Raman Spectrometer:** Using a fiber optic probe and laser, Raman identifies the contents of Chemical Agent Identification Sets (CAIS), glass bottles containing various agents and industrial chemicals once used to train Soldiers.



*In addition to assessing recovered military items with unknown fills, MMAS also serves as a command center, equipment storage area and weather monitoring system.*

MMAS also serves as a command center, equipment storage area and weather monitoring system, constantly monitoring changing weather conditions. MMAS operators use cameras to monitor activity around the site. Powered by a portable generator, MMAS can be on site for extended periods of time. MMAS can travel to all 50 states and be transported by military aircraft, then driven to a site. Once on site, the system can be operational within 25 minutes.

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