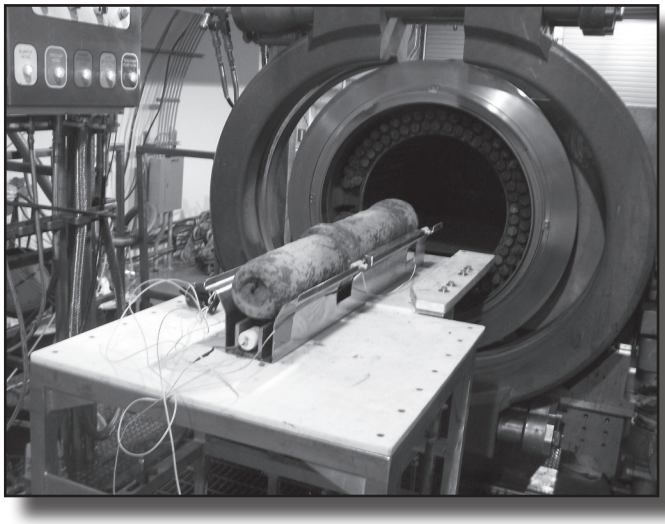
Army Achieves Major Program Milestone

By Ms. Karen Jolley Drewen

The U.S. Army Chemical Materials Agency (CMA) announced that it completed its mission to destroy all nonstockpile materiel that had been declared when the United States entered into the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons and on Their Destruction (commonly known as the Chemical Weapons Convention [CWC])—an international treaty mandating the destruction of our Nation's chemical warfare stock. This milestone also marks the destruction of the largest inventory of recovered chemical warfare materiel to date (more than 1,200 munitions) with a stellar safety record.

CMA's Nonstockpile Chemical Materiel Project (NSCMP) began operations at the Pine Bluff Explosive Destruction System (PBEDS) facility, Pine Bluff Arsenal, Arkansas, in June 2006 to destroy items such as 4.2-inch mortars and German Traktor rockets that were captured during World War II. Destruction operations were completed on 14 April 2010.



The PBEDS has been used to destroy more than 1,200 munitions such as this German Traktor rocket.

Munitions were assessed at Pine Bluff before treatment in the PBEDS, which uses a neutralization technology to provide safe, environmentally responsible treatment. Developed as an alternative to open detonation, the transportable explosive destruction systems provide onsite treatment and neutralization of material and prevent the release of vapor, blast, and munition fragments from the process. Operators confirm complete neutralization of the chemical agent by sampling liquid and air before opening the system.

"This milestone underscores our commitment to the CWC," said Mr. Conrad Whyne, CMA director. "This accomplishment could not have been possible without the commitment of all the workers, led by the Nonstockpile Chemical Materiel Project—including Pine Bluff Arsenal; Pine Bluff Chemical Activity; Edgewood Chemical Biological Center; 20th Support Command, Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) Analytical and Remediation Activity–West; Sandia National Laboratory; Idaho National Laboratory; Science Applications International Corporation; and supporting work forces. Their levels of technical expertise make it possible for us to fulfill our mission while protecting the public, workers, and environment."

The NSCMP research and development team, faced with the unique and diverse inventory of recovered munitions at the PBEDS facility, invented patent-protected processes and cutting-edge vessel enhancements. NSCMP engineers and chemists received a U.S. National Patent for developing a technology that improves the detoxification of lewisite, a World War II-era, German, arsenic-based compound. Before their work, the Army was challenged by the disposal of lewisite and other compounds containing arsenic. System enhancements included the Advanced Fragment Suppression System, which reduces the amount of solid waste that is generated by up to 80 percent, significantly cutting costs and supporting the NSCMP commitment to environmental stewardship.

Ms. Drewen is a public affairs officer with the CMA.