

Eliminating the Chemical Stockpile

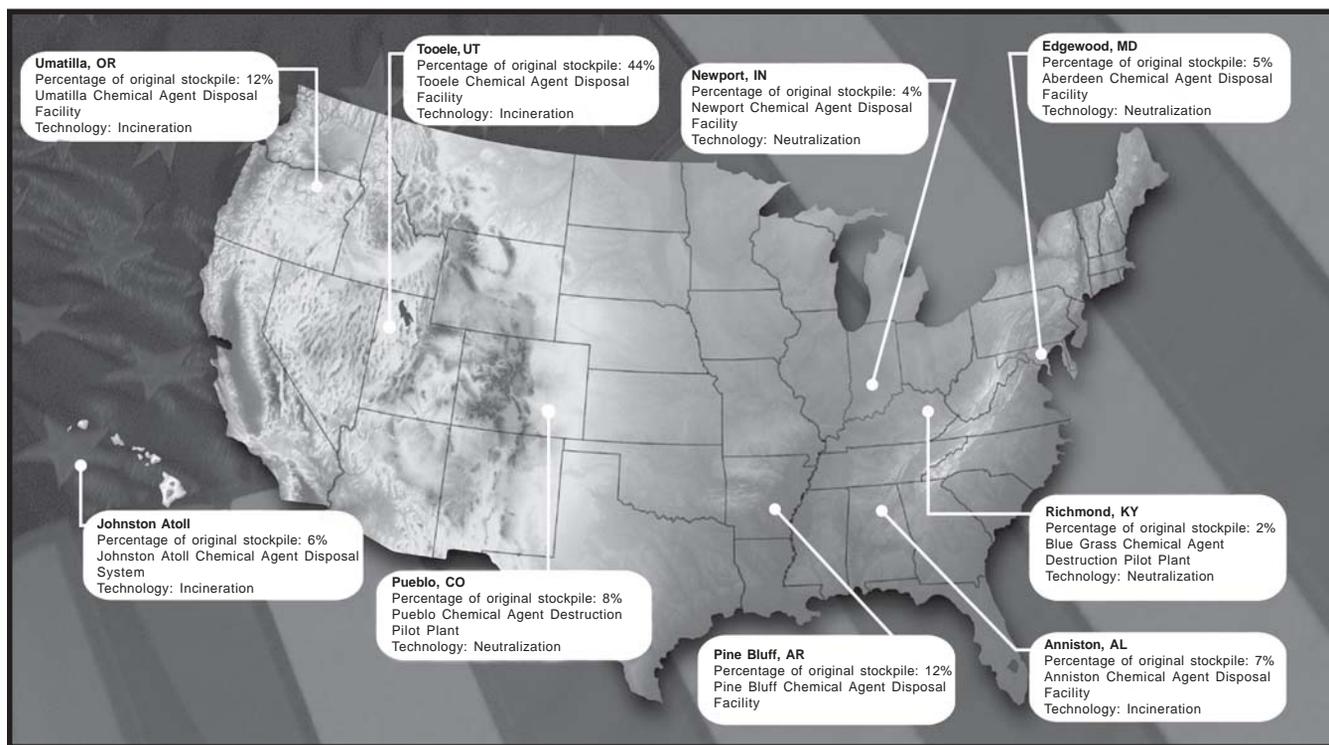
By Ms. Raini K. Wright

In 1985, the U.S. Congress passed Public Law 99-145, requiring the Department of Defense to dispose of its chemical weapons. As a result, the Army's Program Manager for Chemical Demilitarization was formed with the task of safely eliminating the stockpile. In 1997, the United States signed the International Chemical Weapons Convention (CWC) treaty. This agreement required the United States to destroy its chemical weapons stockpile by the year 2007. A host of other nations have also signed the treaty, which calls for the destruction of all chemical weapons worldwide and prohibits the use, stockpile, or production of chemical weapons.

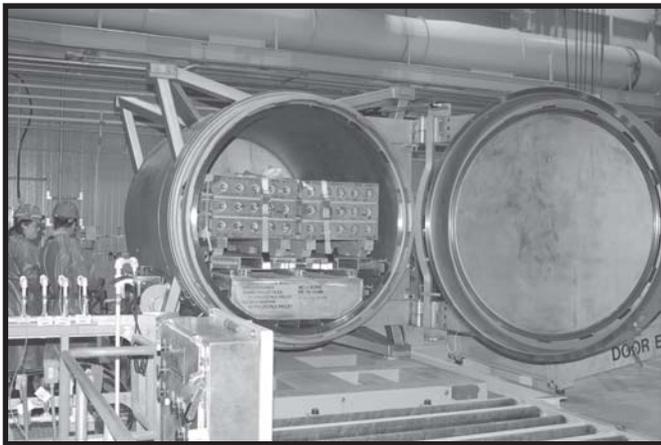
For decades, the Army has studied numerous technologies used for the destruction of chemical warfare agents. Due to the completeness of the incineration process and its ability to handle all agent types and munitions configurations, incineration was deemed the

most proven technology available to safely eliminate the stockpile while ensuring maximum protection of the workers, the community, and the environment. In 1984, the incineration process was also recommended and endorsed by the independent National Research Council (NRC) as the safest process available to destroy the stockpile. In 1994, the NRC conducted a follow-up study and again recommended the incineration process as the safest technology to destroy the stockpile. The incineration process was further reinforced by recommendations from the Centers for Disease Control.

The Pine Bluff Arsenal (PBA) stores about 12 percent of the Nation's original stockpile. The Army began construction of the Pine Bluff Chemical Agent Disposal Facility (PBCDF) in January 1999, following the issue of regulatory permits by the Arkansas Department of Environmental Quality (ADEQ). The permits were issued



U.S. chemical weapons stockpile sites



Interior of an enhanced on-site container

only after the ADEQ thoroughly reviewed the Army’s permit application and ensured that the health and safety of the PBCDF workers, the public, and the environment were protected. An appeal of the PBCDF permits was filed in January 1999. The permits were affirmed in May 2000, after an Arkansas Pollution Control and Ecology Commission adjudicatory hearing in September 1999. Further appeals, advanced to the Arkansas State Supreme Court, upheld the permits.

Construction on the PBCDF was completed in November 2002. The site covers 26 acres, with construction encompassing the former quinuclidinyl benzilate (BZ) Destruction Facility. Personnel at PBCDF have invested more than 11 million hours constructing, testing, and training for disposal operations. The testing and training phases were completed in 2005. Operations

began in March 2005 and will require a minimum of five years to complete. Closure will begin immediately after operations are completed, with an estimated duration of 2 years. Between 700 and 800 contract workers are expected to be employed at PBCDF during disposal operations.

Eliminating the stockpile involves separating the components of the munitions—liquid agents, explosives, and metal parts—using a controlled and automated system. Each of the components is disposed of in its own incinerator. Each incinerator has its own pollution abatement system, which thoroughly cleans emissions to meet federal and state requirements. To ensure the protection, safety, and health of the workers, the community, and the environment, operations are conducted using strict environmental controls with redundant safeguards.



Pollution Abatement System

For additional information regarding the PBCDF or the Army’s Chemical Stockpile Disposal Program, contact the—

Outreach Office for Chemical Disposal
7197 Sheridan Road
Suite 110
White Hall, Arkansas 71602

Telephone: (870) 247-2025 or (870) 534-4901 ☎

Ms. Wright is the public affairs officer for the PBCDF. She can be reached at (870) 540-2047.

| Stockpiles Safely Eliminated (As of 24 July 2006) | |
|--|---------------|
| PBCDF Weekly Totals | Amount |
| Nerve-agent GB rockets | 897 |
| Nerve-agent GB pounds* | 16,911 |
| PBCDF Project Totals | Amount |
| Nerve-agent GB rockets | 45,937 |
| Percentage of nerve-agent GB rockets | 50.8% |
| Nerve-agent GB pounds* | 479,772 |
| Percentage of total chemical-agent tons | 6% |
| *Includes chemical agents destroyed in the deactivation furnace and the Liquid Incinerator System. | |