Highlighting the U.S. Army's Chemical Demilitarization Program

Reach

Anniston
Summer 2002

Contact Us

Anniston Chemical Demilitarization Community Outreach Office
11 East 10th Street
Anniston, AL 36201

Outreach Office Hours
Monday–Friday
8:30 a.m.–5 p.m.
Other hours by appointment

Outreach Office Staff
Charles Steele
csteele@nti.net
Misty Milam
mmilam@nti.net
Shane Milstead
annistonoro@nti.net
(256) 238-0120

ANCDF Public Affairs Officer
Mike Abrams
mabrams@ancdf.org
(256) 238-4318

ANCA Public Affairs Officer
Cathy Coleman
Colemanc@anad.army.mil.
256-235-7942

Westinghouse Public Affairs Officer
Donavan Mager
donavan.mager@wancdf.wec.com
256-238-0721, ext. 137

U.S. Army Program Manager for Chemical Demilitarization
PMCD

Incineration: A safe, proven disposal process

Since 1990, the U.S. Army has used incineration safely and successfully to dispose of the country's stockpile of chemical nerve and blister agent. To date, more than one million chemical weapons and more than 16 million pounds of chemical agent have been destroyed.

The Johnston Island facility, located southwest of Hawaii, began incineration operations in 1990 and destroyed its last chemical agent munition in November 2000. The Army has an incineration facility operating in Utah, facilities preparing for operations in Alabama and Oregon and a facility under construction in Arkansas.

"Our chemical weapons disposal facilities are state-of-the-art, engineered with specially designed weapons handling processes and detailed procedures to protect the workers, environment and public," explained Anniston Site Project Manager Timothy Garrett.

The Army's incineration processes are based on years of experience and advances that ensure safe disposal of the various nerve and blister agents, munitions and containers. The Environmental Protection Agency publicly stated that emissions from Johnston Island are the cleanest of any U.S. incinerator.

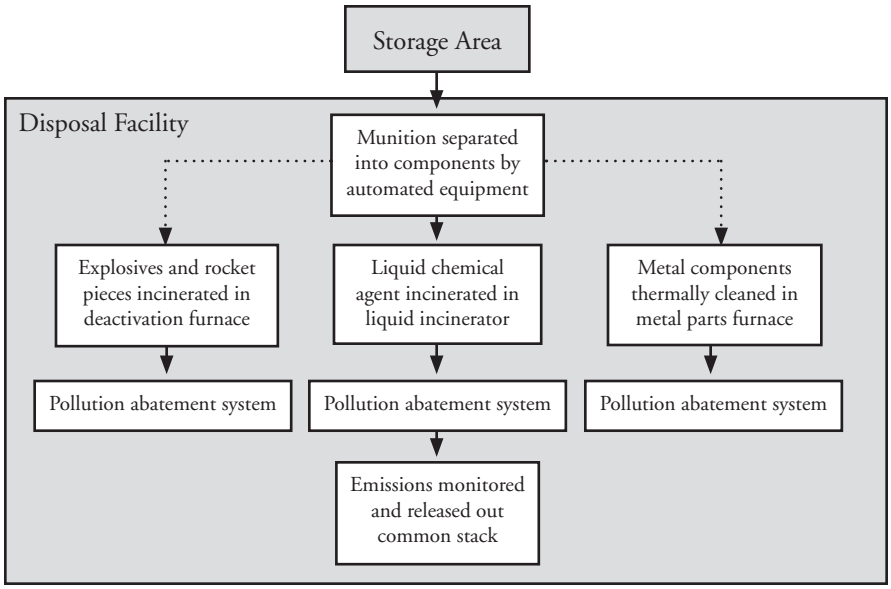
The Army's incineration process includes the following safety features:

- Stringent emission standards. The Army monitors incinerator stack emissions at levels much stricter than regulatory standards. These monitoring levels were established with the assistance and approval of the Department of Health and Human Services' Centers for Disease Control and the Surgeon General's Office.

- Higher temperatures to ensure complete agent destruction. Army incinerators operate at significantly higher temperatures and longer periods of time than commercial hazardous waste incinerators. This ensures complete destruction of chemical agent and total decontamination of the casings and munition pieces. In addition, gases from the incinerator furnaces pass through a pollution abatement or removal system to further cleanse emissions. As a final safeguard, the emissions are monitored to ensure complete destruction of agent.

continued on page 3

Chemical Agent Munitions Incineration



"The trial burns push the incinerator through phases tougher than normal operating conditions," Westinghouse Assistant Project Manager Fern Thomassy said.

DFS trial burns completed

The Anniston Chemical Agent Disposal Facility passed another milestone in June with the completion of the surrogate trial burn to test the deactivation furnace system.

The deactivation furnace is designed to destroy the explosive components and any residual agent associated with the rockets, projectiles and land mines. The furnace underwent a series of trial burns using surrogate chemicals, which are a combination of organic compounds that are more difficult to incinerate than actual agent. The organic mass being fed during the trial burn also is designed to simulate 34 undrained or gelled rockets per hour. The metals processed are a combination of the metals found in 34 undrained rockets plus the metals found in the propellant and paint of 40 drained rockets.

"The trial burns push the incinerator through phases tougher than normal operating conditions," Westinghouse Assistant Project Manager Fern Thomassy said.

Anniston's deactivation furnace is designed to destroy explosive components and residual agent.

During the trial burn, metal emissions were monitored and hazard control procedures were followed for handling the chemicals. Trial burn results were sent to the Alabama Department of Environmental Management Agency (ADEM), which will evaluate and determine how well the furnace destroyed the surrogate chemicals.

Surrogate trial burns are required by the Resource Conservation and Recovery Act permit, which is issued by ADEM. The permit stipulates that the facility's deactivation furnace system must demonstrate the ability to effectively treat agent while ensuring the maximum protection of human health and the environment.

The trial burns are conducted in each of the facility's three furnace systems, which are designed specifically to destroy chemical weapons stored in Anniston. When conducting the trial burns, the furnace was operated at both high and low temperature ranges in order to prove the furnace's ability to incinerate the surrogate chemical.

In April, the facility completed successful trial burns on the liquid incinerator that destroys chemical agent. Following the deactivation furnace trial burns, the facility will conduct trial burns on the metal parts furnace, which is designed to thermally clean metal parts and any residual agent. ADEM also will review the trial burn results.

"During the surrogate trial burns, the incinerators must achieve a destruction and removal efficiency of 99.9999 percent," explained Timothy Garrett, the disposal facility's project manager. "By achieving this rate, we will ensure the safety of our workers, community and environment."

If you would like more information concerning the surrogate trial burns being conducted at the Anniston Facility, please visit the ORO located at 11 East 10th Street or call us at (256)238-0120.

Fiori oversees chemical weapons disposal program

Dr. Mario Fiori, Assistant Secretary of the Army for Installations and Environment, recently was named to oversee the Army's chemical weapons disposal program. Previously, Fiori's office shared program responsibility with the Assistant Secretary of the Army for Acquisition, Logistics and Technology. Now, responsibility for all program aspects—oversight, execution, environmental stewardship, safety, occupational health and emergency preparedness—is consolidated under Fiori's leadership.

"I am pleased to have the opportunity to work with all interested parties to ensure the safe destruction of America's stored chemical weapons. We will work in partnership with the community to achieve our shared goal of eliminating these weapons safely," said Fiori.

Fiori, who Pres. George W. Bush appointed assistant secretary in August 2001, has an extensive military career and background in environmental programs and safety performance. Prior to his appointment, he was founder and president of a consulting firm specializing in enhanced operational safety programs. He also worked for the U.S. Department of Energy, serving on the Defense Nuclear Facilities Safety Board. He later managed the department's Savannah River project in South Carolina, which conducts advanced research on nuclear waste management and clean up.

A graduate of the U.S. Naval Academy, Fiori also holds master's degrees in mechanical and nuclear engineering, and a doctorate in nuclear engineering from Massachusetts Institute of Technology. During his naval career, he served in the nuclear submarine force on various attack subs including the USS Pargo, USS George Washington Carver and USS Spadefish.

"I am pleased to have the opportunity to work with all interested parties to ensure the safe destruction of America's stored chemical weapons. We will work in partnership with the community to achieve our shared goal of eliminating these weapons safely," said Fiori.

---

continued from page 1

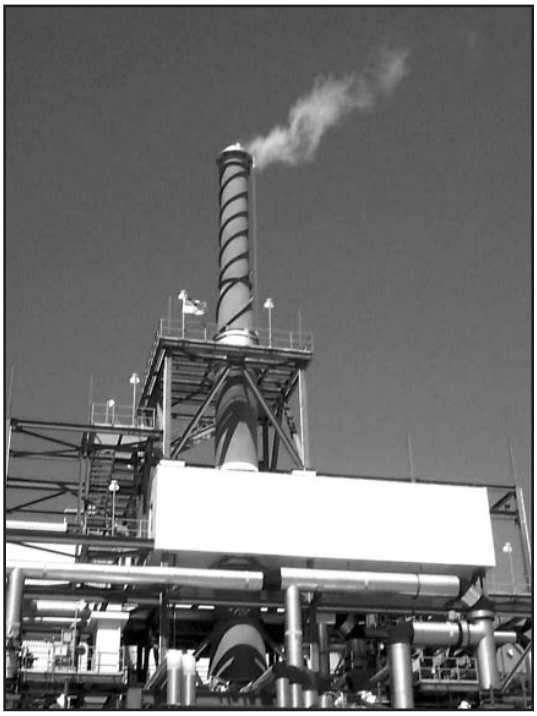
- Automatic shutdown if irregularities are detected. Computer programs in the control system monitor the process for such things as incinerator temperatures, airflow rates and pressures. These programs automatically shut down the feeding of agent to the incinerators if process irregularities are detected. Agent processing is not restarted until corrective actions have been taken and approved by oversight agencies.

Other safety features include:

- Agent vapors are contained and filtered so that only clean ventilation air is released to the environment.

- Explosives and rocket propellants are removed and processed in special, automated explosion containment rooms designed to contain an unlikely explosion.

- Agent is drained from the munitions into storage tanks until it is incinerated. The storage tanks are designed to contain the chemical agent even in the event of an earthquake.



The Army monitors incineration stack emissions at stricter levels than regulatory standards.

Reach

We want to hear from you ...

The Anniston Chemical Demilitarization Community Outreach Office serves as a clearinghouse of information about the chemical weapons stockpile stored at Anniston Army Depot and the Army's plans for chemical weapons disposal. The outreach office has informational materials that can address your questions or concerns.

If you would like more information about the Anniston Chemical Demilitarization Community Outreach Office, please telephone (256) 238-0120 or complete this form and mail it to:

Anniston Chemical Demilitarization
Community Outreach Office
11 East 10th Street
Annisotn, Alabama 36201

Would you like to be added to our mailing list?

❑ Yes ❑ No

Would you like an information packet mailed to you?

❑ Yes ❑ No

If you answered yes to either of these questions, please complete the following:

Name_____
Address_____
City/State/Zip _____
Phone (optional) _____
E-mail (optional)_____

The outreach office schedules speaking presentations that can be given to large or small community groups, clubs, organizations, etc. If you know of a community group that might be interested, please complete the following:

Name_____
Address_____
City/State/Zip _____
Phone (optional) _____
E-mail (optional)_____

Anniston Chemical Demilitarization
Community Outreach Office
11 East 10th Street
Anniston, Alabama 36201