



## CMA PROGRESS AT A GLANCE

## as of March 20, 2011:

**Anniston Chemical Activity, Ala.:** Anniston Chemical Agent Disposal Facility (ANCDF) is closer to completion with more than 96 percent of the chemical munitions stockpile at Anniston Army Depot demilitarized. All nerve agent-filled munitions and more than 91 percent of the mustard-filled munitions have been eliminated. Tens of thousands of mortars and projectiles were disassembled using the Linear Projectile Mortar Disassembly system in a special project to help develop reliability data to be used when disposal operations begin at Pueblo Chemical Depot, Colo. Operations of the Static Detonation Chamber, a European system designed to demilitarize problematic munitions, started last month.

**Blue Grass Chemical Activity, Ky.:** Blue Grass Chemical Activity (BGCA) began overpack operations of stored mustard projectiles for future X-ray assessments. The initial process is expected to last several weeks, and marks BGCA's first steps in preparation for overall stockpile demilitarization. See article on this page for more information.

**Deseret Chemical Depot, Utah:** Tooele Chemical Agent Disposal Facility (TOCDF) has safely destroyed 6,122 mustard agent-filled ton containers, 54,453 mustard agent-filled 155 mm projectiles and 63,274 mustard agent-filled 4.2-inch mortars. Overall, TOCDF has processed more than 95 percent of the Deseret Chemical Depot's mustard agent stockpile and approximately 97 percent of the original agent tonnage.

**Pine Bluff Chemical Activity, Ark.:** Pine Bluff Chemical Agent Disposal Facility (PBCDF) continues with safe and compliant closure operations. The plant continued removal of piping/tanks in the toxic cubical area. The Closure Integrated Baseline Review was held last month. The facility also hosted a ceremony commemorating the completion of chemical weapons disposal operations. The Pine Bluff Chemical Weapons Stockpile Elimination Ceremony was held March 10 in downtown Pine Bluff.

**Pueblo Chemical Depot, Colo.:** Pueblo Chemical Depot (PCD) stores mustard-filled munitions: 105 mm projectiles and cartridges, 155 mm projectiles and 4.2-inch mortar cartridges. The Chemical Operations Directorate is preparing for two major operations this month: a Surety Management Review during the week of April 18, and updating the Waste Analysis Plan to support the Compliance Schedule for the Colorado Department of Public Health and Environment. Construction of the North Fire Station continues and is on schedule for completion in mid-June. The 70-ft. by 70-ft. building will have three drive-thru bays and accommodate a seven-person crew.

**Umatilla Chemical Depot, Ore.:** Umatilla Chemical Agent Disposal Facility's (UMCDF) request to operate the recently installed Rinsate Collection System (RCS) was approved by the Oregon Department of Environmental Quality on March 16. The RCS will expedite mustard agent disposal. Currently, rinsate is drained from a ton container of HD mustard into one or more recipient ton containers, which are then treated in the Metal Parts Furnace. With the new system, rinsate may be transferred to RCS tanks and then fed to the Liquid Incinerators, which will eliminate additional recipient processing time. The RCS is undergoing systemization and testing, with start-up expected this month. UMCDF has eliminated 1,432 ton containers of mustard agent and destroyed 71 percent of Umatilla's original chemical agent stockpile.



The Utah visit included a tour of the Utah State Capitol Building, where the OPCW EC visiting members were welcomed by Lt. Governor, Greg Bell. The visiting delegation included several international ambassadors and key U.S. Army personnel, including Deputy Assistant Secretary of the Army for Elimination of Chemical Weapons, Carmen Spencer (front row, second from right), Ambassador Robert P. Mikulak, U.S. Representative to the OPCW (front row, third from left) and Conrad Whyne, Director of the U.S. Army Chemical Materials Agency (second row, second from left).

## OPCW Executive Council visits PCD and TOCDF

Representatives from the Organisation for the Prohibition of Chemical Weapons (OPCW), located in the Netherlands, recently visited the Pueblo Chemical Depot (PCD) and the Deseret Chemical Depot (DCD).

Both visits showcased the United States' commitment to continued safe storage and ultimate destruction of the chemical weapons stockpiles.

Executive Council representatives visited PCD on February 28. Lt. Col. Rob Wittig, PCD Commander, and Walton Levi, Acting Site Project Manager for Pueblo Chemical Agent Destruction Pilot Plant (PCAPP), hosted the visit. Upon arrival, OPCW officials attended a small reception hosted by the Defense Threat Reduction Agency where they met with the Colorado Chemical Demilitarization Citizen's Advisory Commission.

During the visit, representatives toured the depot's chemical munitions storage structures and the PCAPP site. CMA Director and U.S. Army Element, Assembled Chemical Weapons Alternatives (ACWA) Acting Program Manager Conrad Whyne briefed the visitors with an overview of PCAPP as well as the chemical weapons storage program.

During the Tooele visit on March 1, Utah Lt. Governor Greg Bell welcomed the OPCW representatives and U.S. officials and program leadership—Carmen Spencer, Deputy Assistant Secretary of the Army (Elimination of Chemical Weapons), and Mr. Whyne—during a tour of the newly renovated state capitol.

The second day, guests arrived on site and attended presentations in the morning, followed by a tour of the Tooele Chemical Agent Disposal Facility (TOCDF) and the Area 10 Liquid Incinerator (ATLIC), which is similar to the TOCDF's liquid incinerators, but smaller in size. The ATLIC was designed to dispose of GA and lewisite-filled ton containers. Briefings in the morning were given by Mr. Spencer, DCD Commander, Col. Mark Pomeroy, and TOCDF Site Project Manager, Ted Ryba. A briefing presented to the OPCW officials covered a timeline of destruction, including the planned beginning of Detonation of Ammunition in a Vacuum Integrated Chamber operations. Deseret Chemical Depot currently has 4.2-inch mortars, 155 mm projectiles and ton containers left to destroy.

Nationally, approximately 85 percent of the U.S. stockpile of munitions has been safely destroyed. Stockpiles at Johnston Island; Aberdeen, Md.; Newport, Ind.; and Pine Bluff, Ark., have been completely eliminated. CMA sites in Alabama, Oregon, and Utah are currently operating, and new ACWA disposal facilities are being built in Kentucky and Colorado.

## BGCA Begins First Steps in Overall Stockpile Demilitarization

Employees at the Blue Grass Chemical Activity (BGCA) have completed containerization of 60 H projectile samples. The purpose of this operation is to select and overpack sample projectiles that are representative of the entire stockpile. While the projectiles are currently stored in three separate igloos,

they will be safely transported to one designated storage igloo for future x-ray operations. X-ray operations are scheduled to begin in May, and expected to last several weeks. This process marks BGCA's first step in preparation for overall stockpile demilitarization.

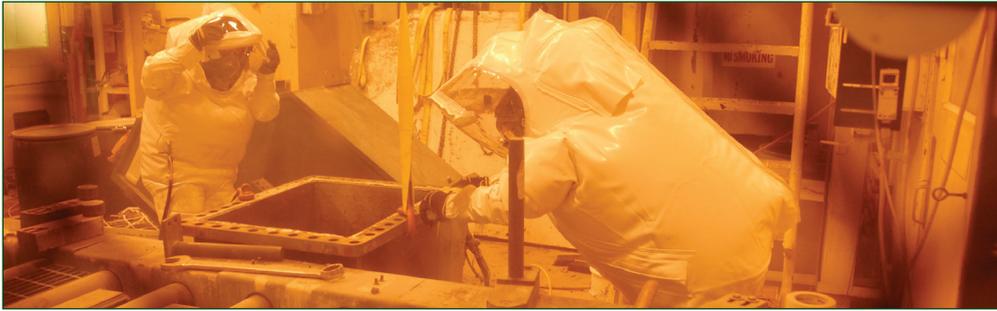
## DCD ACHIEVES SAFETY MILESTONE

On March 3, 2011, the Deseret Chemical Depot (DCD) reached and surpassed one million man-hours of continuous effort without an accident resulting in a Lost Day Away From Work (LDAW) injury. This is the first achievement of this kind for the government work force at DCD and the Army's five remaining chemical weapons storage sites.

"This is a reflection of our worker's commitment to maintaining a safe work environment," said depot Commander Col. Mark Pomeroy. "When our employees work safely, it means we are keeping the community and environment safe as well," he added.

Approximately two thousand man-hours are accumulated at DCD each day of safe work without a LDAW by the nearly 350 government workers. This consecutive safe hours string began in September 2009.

DCD's recordable injury rate (RIR) through February 2011 was 0.9. The RIR, a safety measure, records injuries for every 100 man-years worked. A man-year is equivalent to fifty 40-hour work weeks or 2,000 man-hours. DCD's RIR is equivalent to people who work on computer design or in credit card offices.



During what is expected to have been the last Demilitarization Protective Ensemble entry at the CAMDS facility, URS CAMDS mechanical technician Randy Nielson pushes on the base plate of the Bulk Drain Station (BDS) in an effort to knock it loose, while mechanical technician Dustin Kinney watches closely for any movement. After Nielson and Kinney were able to tip the BDS base up enough, they were able to conduct the point-source air monitoring underneath the base plate. (Photo courtesy of U.S. Army)

## Operators Perform Last CAMDS DPE Entry

URS employees at the Chemical Agent Munitions Disposal System (CAMDS) have performed what is believed to be the final Demilitarization Protective Ensemble (DPE) entry at the facility. On Feb. 24, Mechanical Technicians Dustin Kinney and Randy Nielson entered the CAMDS Bulk Item Facility to complete point-source air monitoring underneath the base plate of the Bulk Drain Station, equipment previously used to punch and drain ton containers. Kinney and Nielson (along with two other employees from the previous DPE entry) had to jack hammer through nearly two inches of epoxy grout in order to knock the base plate loose, allowing them to tip the base plate up enough to execute the air monitoring tests.

"The air monitoring results immediately came up clean, after they [Kinney and Nielson] completed the two required cycles of air monitoring," said CAMDS Operations Manager Cliff Shaw, "which ensures that agent contamination levels are low enough for the workers to perform the remaining closure work at CAMDS in a lower level of protective equipment."

The DPE suit was developed to provide personnel working in chemical agent environments with the best protective equipment possible. Now that CAMDS is in the closure phase and no chemical agent operations

have taken place since 2003, workers have been able to decontaminate most of the areas within CAMDS. "It is less strenuous for the employees to work in a lower level of protective equipment because the physical and heat stresses are reduced," explains U.S. Army Chemical Materials Agency Engineering Technician Larry Nielson. "When the workers do not have to lug around 30-plus pounds of gear on their backs, they can save their energy for the actual work," Nielson said.

It has been more than 30 years since the DPE suit was initially used to make the first toxic entry at the CAMDS facility in September 1979. The suit originated at the U.S. Army Edgewood Research, Development and Engineering Center in Maryland, and is used at all of the disposal facilities, but for the past three decades, CAMDS has been responsible for the ongoing tests and the improvements made to the suit.

"Since the first generation of the DPE suit, CAMDS has successfully evolved the suit with a number of changes, from major redesigns in order to increase the material thickness to more simple modifications like enhancing the wearers field of vision," Nielson added, "but the end goal of each upgrade has always been the same—to improve overall quality, comfort and performance of the suit."

## Umatilla Honors Workers of 1944 Incident

Sixty-seven years ago, in the dark of night, six families' futures were unalterably changed. The country was in the midst of World War II, and the majority of the community surrounding the Umatilla Chemical Depot was hard at work handling conventional munitions. On March 21, 1944, a depot storage igloo exploded. The igloo contained 264 500-pound conventional bombs and the force of the explosion completely destroyed the igloo, killing six workers. It was to be the only fatal munitions handling accident in the depot's 70-year history. An extensive Army investigation failed to determine the specific cause of the accident. Today, memorial markers at the accident site serve as reminders that munitions must be handled safely.

In honor of those who died and to commemorate that fateful day, the depot hosted a memorial ceremony on March 21, the first time in recent

memory the ceremony has been held on the actual day of the explosion. Don Barclay, Deputy Director of the U.S. Army Chemical Materials Agency, and Maj. Gen. Raymond Rees, Oregon State Adjutant General, were guest speakers.

"I spent the first 10 years of my career in ammunition production, so I understand the potential for accidents, for people putting themselves in harm's way to protect our freedom," he said. "It's a privilege to come back to Umatilla to honor those who have given their lives to support our troops, and to show respect to the past and present work force who have made such a commitment to safety and excellence," said Mr. Barclay.

Family members of those who died and the public were invited to the event.

## AVOIDING BEE STINGS THIS SPRING

Along with the beauty of spring, come the challenges of pollen, which can aggravate allergies and attract bees. Honeybees are beneficial to society by providing pollination of crops, orchards and flowers. They also produce honey and wax which can be used for food and medicinal purposes. However, bees can also be a nuisance for springtime activities such as picnicking, gardening or simply playing outside.

The best thing to do around bees is to leave them alone, and slowly get away from the area. Do not swat them. Many people are allergic to bee stings and if you've never been stung before, there's a chance you might be too. If stung, get away from the bees as quickly as possible and be sure to protect your eyes and face. Retreat to a car or house where the bees cannot follow. If there is any difficulty breathing, if you have been stung multiple times, or if you know you are allergic to bees, you should seek medical attention as soon as possible.

For single stings with little or no reaction, the stinger should be removed as quickly as possible and the area cleaned with soap and water. A cold compress and hydrocortisone cream can be applied to prevent swelling and itching.

When eating outside in the spring and summer, it's best to keep food and beverages covered and use a wide brimmed glass for drinking so you can see if any bees have gotten into your drink. Keeping trashcans clean and tightly covered will also prevent the attraction of bees.

## CMA Q&As



DPE suits ready for use. (Photo courtesy of U.S. Army)

### What is a DPE?

DPE is an acronym for the Demilitarization Protective Ensemble, a heat-sealed, one-time use suit that weighs about 50 pounds, with supporting equipment. Airtight DPEs provide the highest level of protection for workers accessing areas of the disposal plant contaminated during the chemical weapons disposal process. Part of the DPE is a radio transmitter that provides contact with an emergency backup crew, control room and other support staff. The ensemble also has a life support system that consists of a hose connection to purified air, a self-contained breathing apparatus that provides eight to ten minutes of escape air and a heart monitor to determine levels of distress. Three layers of gloves and butyl-rubber boots that are sealed with tape complete the ensemble. Due to the physical stress of wearing the suit, operators can only wear them a maximum of two hours at a time.



A DPE entrant cleans liquid GB agent from an overpacked rocket that leaked inside its overpack. (Photo courtesy of U.S. Army)

### What are overpacked munitions?

When a leak is detected in a chemical munition, the leaking munition is sealed in a containment device (overpack) to prevent any further chemical agent release. Overpack containers have been designed for everything from M55 rockets to the various chemical-filled projectiles. Once overpacked, the munition is moved to an igloo where it is monitored on a more frequent basis. Igloos are steel-reinforced concrete structures that are about 13 feet high, 26 feet wide and can be as long as 80 feet. The igloos were designed originally to store conventional weapons.

## Munitions to be destroyed...

### as of March 20, 2011:

CMA has 27,968 chemical agent munitions left to destroy

- 1,602 HD/H ton containers
- 536 HT 4.2-inch mortars
- 211 HD 4.2-inch mortars
- 23,064 HD 105mm projectiles
- 2,541 HD/H 155mm projectiles
- 14 L/GA/TGA ton containers