



# CMA NEWS

## September 2011

### CMA PROGRESS AT A GLANCE

as of August 21, 2011:

**Anniston Chemical Activity, Ala.:** Anniston Army Depot has less than 1,000 chemical agent-filled munitions in storage. Following more than 8 years of safe operations to destroy 7 percent of the Nation's cache of chemical agent-filled munitions, the depot is 99.9 percent complete. The last mustard-filled munitions, expected to be 33-pound 105 mm projectiles, are scheduled to be destroyed this month. Anniston Chemical Activity (ANCA) and Anniston Chemical Agent Disposal Facility (ANCDF) employees, made up of military, civilian and contractor personnel, have begun the next phase in the Anniston mission. ANCA employees are sampling storage igloos to make sure they are not contaminated. Simultaneously, contractors at the ANCDF are preparing to thoroughly decontaminate the destruction facility prior to closure.

**Blue Grass Chemical Activity, Ky.:** Blue Grass Chemical Activity (BGCA) began conducting tests and collecting data to determine if installing the Igloo Filtration System (IFS) will contribute to safe storage. Testing the IFS as a consideration for BGCA igloos is part of the commitment to provide optimum storage conditions for the munitions and safe working conditions for BGCA personnel, as well as maximum protection to the public and the environment. Results from the data collection will be analyzed and released sometime in November. BGCA is now available to view and "like" on Facebook. *Please let them hear from you!*

**Deseret Chemical Depot, Utah:** Tooele Chemical Agent Disposal Facility's (TOCDF) closure plan is now open for public comment, after the Utah Division of Solid and Hazardous Waste drafted its final modifications. Because the original TOCDF closure plan was developed in the mid-1990s, it has undergone extensive revisions to incorporate programmatic closure concepts. These concepts are the compilation of lessons learned while closing other chemical demilitarization facilities, including Johnston Island and those in Maryland, Indiana and Arkansas. Programmatic closure concepts provide a sequence for closure-related activities, maximizing efficiency and reducing time and costs, while maintaining the safety of the workers.

**Pine Bluff Arsenal, Ark.:** Pine Bluff Chemical Agent Disposal Facility continues safe and environmentally compliant closure activities. In July, the Systems Contractor (SC) workforce reached two key safety milestones. The SC surpassed 1 million man-hours worked without any Recordable Injuries and surpassed the 5 million man-hours worked consecutively without any Lost Workday Away Cases. Additionally, the Southwest Research Institute laboratory subcontractor reached the safety milestone of working one year without incurring any First Aid. These safety achievements were accomplished while performing closure and demolition activities.

**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. A Media Day is scheduled for Sept. 22. Local and regional media will be invited to tour the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) and also tour a chemical storage igloo. Media Day will also include a "question and answer" working lunch with PCAPP and PCD leadership.

**Umatilla Chemical Depot, Ore.:** Umatilla Chemical Agent Disposal Facility (UMCDF) successfully completed its "Overfilled Ton Container (TC)" campaign, utilizing a splash shield system, designed and fabricated by project personnel to minimize agent spillage in the Bulk Drain Station (BDS) room, to successfully process nine overfilled TCs. Creation of the splash guard and metal skirt was initiated nearly a year ago after the punch and drain method used on an overfilled TC resulted in a shower of agent that forced extensive decontamination and cleaning in the BDS. On Aug. 10, Run 1 of four planned Rinsate Emissions Demonstration Tests (EDT) began, after utilizing 220 hours of the Oregon Department of Environmental Quality-approved 350 hour maximum to "shakedown" its new rinsate system. The final EDT, Run 4, was conducted on Aug. 18. The tests were performed at full feed rates and designed to quantify what is coming out of the LIC 2 stack. Off-site data analysis will compare emissions from processing rinsate to emissions from processing HD agent and will be used to update/confirm the current Human Health Risk Assessment. Umatilla's final campaign, mustard agent disposal, is 84 percent complete and is expected to end in November.

### Blue Grass Media-Day Tour Highlights Safe Storage – no Leakers Reported so far for 2011

No leaker munitions found in storage so far this year, compared to six leakers in 2010, highlighted the Aug. 2, 2011, media tour of the Blue Grass Army Depot, the Blue Grass Chemical Activity (BGCA) and the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP).

BGCA Commander Lt. Col. Steven Basso reported the zero leakers to date. Lt. Col. Basso noted that safety is the key priority of an operation or activity at BGCA; the leaker report and the tour verified his words.

Starting inside a storage igloo where trained chemical activity workers explained monitoring and corrective procedures, the reporters watched as workers demonstrated overpacking a leaker munition to ensure that no agent enters the atmosphere.

The tour also included demonstrations of how operators use small mobile laboratories to regularly check igloos, in addition to the main laboratory where more sensitive tests are performed.

### General Physics Celebrates 20 years without a Lost-time Accident at the CDTF

For the past 20 years, General Physics (GP) has taught 11,520 courses for 62,021 students at the Chemical Demilitarization Training Facility at Aberdeen Proving Ground, Md., without a lost-time accident. GP also received an award for excellence from the Chesapeake Region Safety Council, a chapter of the National Safety Council, which focuses on providing training and education to prevent disabling injuries and save lives.

Greg Thomas, facilities director for GP, attributed the company's safety rate to "a strong leadership team devoted to safety and continuous improvement, time tested processes and procedures and an active safety training program."

Thomas noted that there is an orientation training program for all 35 employees, and the company also offers training on various topics each month.

The contractor will also be honored by CMA Director Conrad Whyne during a ceremony on Sept. 6. "General Physics is an example for CMA and all the systems contractors of how dedication and commitment to safety yields the ultimate return on investment with 20 years without a lost-time accident," Whyne concluded. The 20-year milestone was reached on Aug. 28.

### Suicide Prevention: You Can Save a Life!

Everyone has moments of despair and loneliness, but do you often have longer periods of depression or notice others behaving the same way? September is Suicide Prevention Awareness Month. Suicide prevention can save a life if you are aware of key warning signs. Don't be afraid to get help or ask others for help. There are many resources that can help, and most, if not all, are confidential.

According to the American Foundation for Suicide Prevention, 90 percent of people who commit suicide have diagnosable and TREATABLE psychiatric illnesses. ([www.afsp.org](http://www.afsp.org))

There are many warning signs. Here are a few specific signs to look for:

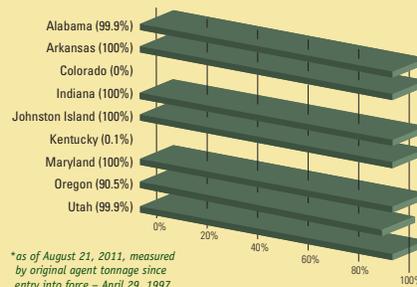
- Talking about ending his/her life or not wanting to live anymore
- Withdrawing from friends and family
- Dramatic and frequent mood changes
- Family history of suicide
- Giving away possessions

If you or someone you know is thinking about suicide, get help immediately! A phone call may save a life.

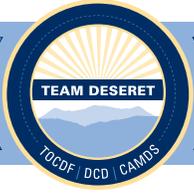
For information on resources near you, visit the Suicide Prevention Resource Center at <http://www.sprc.org> or call the National Suicide Prevention Lifeline at 1-800-273-TALK.

*Every life is valuable.*

### CMA - U.S. CHEMICAL AGENT STOCKPILE DESTROYED



**88.3%**  
of U.S. Chemical Agent stockpile destroyed\*



## SPOTLIGHT ON TEAM TOOEELE

### Disposal Operations to Restart at TOCDF Parallel Processing Needed to Meet Treaty Deadline



If the munition's explosive components cannot be removed with the "gripper" tool (right), operators will use the new pull-shoe feature that has been added to each cutter. The pull-shoe is pneumatically powered, has up to 500 pounds of pulling force and is activated remotely, thus personnel are not in the Explosive Containment Room when stuck bursters are being removed.

As it turns out, disposal operations at the Tooele Chemical Agent Disposal Facility (TOCDF) are not yet finished. It was originally planned that the remainder of Deseret Chemical Depot's (DCD) stockpile would be destroyed at two new facilities: the Area 10 Liquid Incinerator would dispose of the small number of ton containers filled with GA nerve and Lewisite blister agents, and the Detonation of Ammunition in a Vacuum Integrated Chamber (DAVINCH) would take care of the remaining 300-plus mustard-filled 4.2-inch mortars and 155 mm projectiles.

However, as the international treaty deadline of April 29, 2012, draws nearer, the DAVINCH has suffered unexpected delays—from contractual issues to installation—and fallen significantly behind its initial schedule. To regain schedule and meet the treaty deadline, the plan now is to utilize both the TOCDF and the DAVINCH to destroy the remaining 4.2-inch mortars and 155 mm projectiles.

"Parallel processing has always been our backup plan," said TOCDF Site Project Manager Ted Ryba, "but as the DAVINCH schedule continues to lose ground, the need to re-use the plant is a necessity. It is also utilizing a familiar process in order to meet our international obligations."

The remaining 4.2-inch mortars and 155 mm projectiles are safely stored in overpack containers within the Area 10 storage igloos. Most of the 4.2-inch mortars were overpacked during agent sampling operations conducted by DCD personnel. However, the majority of 155 mm projectiles are overpacked because they have either leaked in the past or are so badly deteriorated that they could not be destroyed using TOCDF's normal disposal process.

In 2008, TOCDF workers attempted to process the problematic 155 mm projectiles, but manually removing the explosive components, known as bursters, proved to be difficult—if not impossible—with the knowledge and resources available at the time. Many of the 155 mm projectiles had solidified mustard agent fill, binding the burster and burster well in place. With the burster still in the munition, it can't be sent through the plant's Metal Parts Furnace (MPF).

Rod Chaney, TOCDF closure project manager, who is helping oversee the restart of plant operations, said modifications include a fine-tuned disposal process and reconfigured or new equipment such as a high-powered water spray to break down solidified agent and a remotely operated "pull-shoe" packed with 500 pounds of force to pull out the munition's explosive components. The work will be done inside the TOCDF's Explosive Containment Rooms (ECRs), which have fortified 28-inch thick steel reinforced concrete walls.

"Even with a full day's worth of work in the ECR—an estimated 10 munitions—we will be operating well below the room's explosive storage limit," said Chaney. "And we will not have any personnel in the room while the hazardous operations are done—all of that will be done remotely."

TOCDF's two ECRs will each be outfitted with two cutters. The current plan is to only operate one ECR at a time; that may change if both ECRs can be operated efficiently.

The projectile/mortar disposal campaign will be carried out by dedicated teams to optimize efficiency. The first team (all workers will be dressed in personal protective equipment) will transport the overpacked munitions into the ECR and unpack them. The second team will stage the munitions for cutting and leave the ECR while the cuts are completed. A rotary cutter—the same type utilized for past agent campaigns at the TOCDF—will be used and performed remotely from the plant's control room. Once the needed cuts are completed (4.2-inch mortars will be cut once; 155 mm projectiles will be cut twice), workers will then re-enter the room and attempt to manually remove the burster well assembly. If the assembly cannot be easily removed, workers will position the pull-shoe and again leave the ECR while control room operators remotely attempt to remove the burster. If the burster assembly is still stuck, workers reposition the munition so that the remotely operated high-pressure spray can wash out the solidified agent and free the burster. Once separated, the agent-filled munition casing will be processed through the MPF; the explosive burster components will be destroyed in TOCDF's Deactivation Furnace System.

The third, and final, team of workers then enters the ECR and cleans up the overpacks and waste in preparation for the next round of munitions.

"We plan to focus TOCDF plant operations on the safest and easiest items to handle—the 4.2-inch mortars—and focus the DAVINCH's path forward on the more difficult items such as leakers in double overpacks," said TOCDF General Manager Gary McCloskey. "It's a dual-processing plan that gives us balance and places all of us in our best position for success."

Meanwhile, DAVINCH construction activities are complete and systemization has started. Systemization is a stringent process that first tests individual components of the detonation chamber, including support equipment, then tests each system, and ultimately the entire facility and process. This process helps ensure a safe and efficient disposal process.

TOCDF plant operations are estimated to restart in late October; the DAVINCH is anticipated to start up in late November.

### TOCDF Recognized for Safety— Receives 2011 Industry Leader Award

The National Safety Council (NSC) has awarded the Tooele Chemical Agent Disposal Facility (TOCDF) the 2011 Industry Leader Award, recognizing outstanding safety performance. As one of 52 organizations presented with this award, TOCDF is now part of the top five percent of NSC member companies to qualify for the NSC 2011 Occupational Excellence Achievement Award.

"This achievement clearly demonstrates that safety is a culture embraced by the entire workforce here in Utah," said TOCDF Site Project Manager Ted Ryba. "Keeping this mindset is critical to successful mission completion."

According to an NSC news release issued on July 26, the recipients of this award are selected based on North American Industry Classification Code, lowest total incidence rate and employee work hours.

"It's up to each of us to keep on the same path and continue to strive for excellence as we work to successfully complete our mission and project," said URS General Manager and Vice President Gary McCloskey in an email to employees at the TOCDF.

The awards will be presented at the NSC's annual awards event on November 1 in Philadelphia.

### Safely Share the Road with School Buses

Remember in school when the teacher said, "We all need to learn to share and play well with others?" With the start of the school season comes a reminder to all drivers to "play well with others"—share the road with school buses, crossing guards and children. Safety should be a priority every time you drive, but it is especially critical when driving during the school season. Practice road safety by slowing down, and keep these tips in mind:

#### BE ALERT! WATCH FOR CHILDREN:

- When backing out of a driveway or garage
- Walking in the street, especially if there are no sidewalks
- Playing and/or congregating near bus stops

#### OBEY SCHOOL BUS LIGHTS:

- Yellow flashing lights usually indicate the bus will stop to load or unload children—you should slow down and prepare to stop
- Red flashing lights and an extended stop sign indicate that the bus has stopped and children are getting on or off—the law requires you to stop and wait until the red lights stop flashing, the extended stop sign is withdrawn and the bus begins moving before resuming driving

#### BE AWARE OF SCHOOL ZONES:

- Indicated by flashing lights and decreased speed limits

Let's remember life's lessons learned in kindergarten—share the road this fall and start the school year off with an A+ in safety!