



CMA PROGRESS AT A GLANCE

as of September 23, 2009:

- **Anniston Chemical Activity, Ala.:** Anniston Chemical Agent Disposal Facility (ANCDF) employees have processed more than 59 percent of the chemical munitions stockpile that is stored at Anniston Army Depot. Team Anniston is managing three distinct supporting efforts. An Agent Trial Burn is being finalized, and a Linear Projectile Mortar Disassembly machine has been installed and is being systemized. Data collected on the removal of mortar and projectile explosives will assist future disposal operations at Pueblo Chemical Depot, Colo. A third project, the procurement of a Static Detonation Chamber (SDC) is ongoing. The SDC will be used to dispose of problematic munitions that cannot be safely processed using the automatic equipment in the ANCDF.
- **Deseret Chemical Depot, Utah:** Tooele Chemical Agent Disposal Facility has safely destroyed 4,106 mustard agent-filled ton containers, 54,453 mustard agent-filled 155 mm projectiles and 336 4.2-inch mustard agent-filled mortars. Mustard operations began in August 2006.
- **Newport Chemical Depot, Ind.:** Newport Chemical Agent Disposal Facility (NECDF) workers continue closure operations. On Aug. 27, workers achieved a successful Unventilated Monitoring Test (UMT) in accordance with the UMT test plan. The UMT demonstrated that the Utility Building (UB) has been safely decontaminated to levels below the U.S. Army acceptance criteria, which allows for UB and Filter Farm Building demolition and ultimate NECDF closure. The NECDF demolition subcontractor will begin final demolition in mid-October. The Process Auxiliary Building demolition was completed Sep. 9.
- **Pine Bluff Arsenal, Ark.:** Pine Bluff Chemical Agent Disposal Facility (PBCDF) paused disposal operations on Sep. 7 for a planned two-week outage. The outage allowed workers to perform preventative maintenance activities on the Metal Parts Furnace (MPF), the MPF Afterburner and the Liquid Incinerator (LIC). The current processing rate allowed by the Arkansas Department of Environmental Quality is 75 percent of the permitted maximum value for both the LIC and MPF. The site continues closure activities at the former BZ disposal building in preparation for its demolition.
- **Umatilla Chemical Depot, Ore.:** Umatilla Chemical Agent Disposal Facility (UMCDF) started HD agent disposal in June 2009 and continues to prepare for Agent Trial Burns. Now in its final munitions campaign, the UMCDF continues to plan for eventual closure. In September, a facility closure plan was submitted to the Oregon Department of Environmental Quality for review. The site is aligning closure efforts with UMCDF for an eventual turnover to DA Base Realignment and Closure.

October is Fire Prevention month - "Stay Smart, Don't Get Burned."

Remember to check the smoke detectors in your home and make sure your family has an escape plan in the event of a fire.

DCD Area 10 begins Autoclave System Operations

An autoclave system that uses heat and high-pressure steam to process secondary waste is currently in operations in Deseret Chemical Depot's (DCD) Area 10.

Workers first monitor the wastes and establish the level of agent contamination to determine how the waste will be processed. The secondary waste containers are moved into a glove box called the Drum Ventilation System (DVS) where operators use a specially designed tool to perforate the top of a barrel so the contents can be monitored. If the agent contamination is below 1.0 Vapor Screening Limit (VSL), the drum is removed and stored until it can be shipped off site to a permitted hazardous waste landfill. If the agent reading is at or above 1.0 VSL, the container is sent to the autoclave for thermal treatment to lower the contamination level to below 1.0 VSL, allowing the treated waste to be transported to the hazardous waste landfill.



From outside the Drum Ventilation System, EG&G's Nick Mele performs a Readiness Assessment demonstration, using a pneumatically powered tool to shoot a special plug into the top of a secondary waste barrel to allow air monitoring inside the barrel. The detected level of agent contamination determines how each barrel will be processed (EG&G Photo).

The autoclave process begins as workers load the wastes into the chamber, which is then sealed shut and a vacuum removes the remaining air. The air flows through carbon filters to remove any agent vapors and is monitored to verify that no chemical agent is present. The autoclave unit uses pressurized steam to heat the wastes to approximately 300 degrees Fahrenheit, or higher, to thermally treat the chemical agent.

After the process is complete, the pressure in the autoclave is reduced by venting the gases through a chiller to cool before they are slowly exhausted through the carbon filters where they are monitored for chemical agents.

Secondary waste includes by-products generated from the Tooele Chemical Agent Disposal Facility (TOCDF) as well as "legacy" waste from DCD and the Chemical Agent Munitions Disposal System (CAMDS). It is expected that some of the containers of legacy waste require further characterization so workers in Occupational Safety and Health Administration Level A protective gear safely open the barrels to identify and sort the contents. This is done in a ventilated area called the DVS Sorting Room.

Operators began by treating the estimated one million pounds of secondary waste from TOCDF. When this is complete, they will move on to an additional one million pounds of legacy waste from DCD and CAMDS.

CHANGES TO CMA'S PUBLIC WEB SITE COMPLETED

The U.S. Army Chemical Materials Agency's (CMA) public Web site has been updated to reflect key milestones and changes to the program, using an interactive timeline, a rotating news block and a new Fact File section.

CMA's Interactive Timeline can be accessed from the Home page, the About CMA page or the Press Room page. The timeline features historical milestones throughout CMA's history. Viewers can trace when the chemical weapons were made, how the weapons are destroyed and milestones throughout the years.

CMA's "Home Page" has a new look that includes a news block that cycles through five photos that touch upon various areas of the program. A brief summary is included with each photo.

Lastly, the newest addition to the site is the Fact File, which highlights CMA's munitions and destruction

technologies with an illustration of each, along with a brief summary. It is located on the About CMA page, under the Learn More section or on the Press Room page, under For the Media. Viewers can learn about the munitions CMA has safely eliminated, the incineration and neutralization technologies CMA uses, and how the Non-Stockpile Chemical Materiel Project destroys chemical materiel.

The data we collect from AWStats, the software package used by CMA's Information Management Office to track Web site usage, tells us that viewers have noticed these changes. Viewership to the Top Ten Permanent Web site pages Visited has increased by 28.3 percent, compared to the same time period last year.

If you haven't had a chance to see CMA's new look, take a moment. The address is www.cma.army.mil.



Gone... But Never Forgotten

An old saying, paraphrased, says "It's never over until you cross all the T's and dot all the I's. In the case of the Johnston Atoll Chemical Agent Disposal System, JACADS for short, the "finite" declaration of closure has been crossed and dotted.

The U.S. Environmental Protection Agency (EPA) - Region IX, the U.S. Army Chemical Materials Agency (CMA), the U.S. Army Center for Health Promotion and Preventive Medicine (CHPPM), URS Corporation, Science Applications International Corporation (SAIC), Cooper Zietz Engineers and others officially recognized closure of the JACADS Resource Conservation and Recovery Act permit at a meeting in San Francisco, Calif., Aug. 27, 2009, bringing an end to a project that had been on the Army's books contractually since 1982.

"I stand before all of you today and state, unequivocally, that I am professionally proud," said Steve Bushman, JACADS Site Project Manager for CMA. "All players in this project, and there are so many, need to take pride in knowing what we did out there and what we accomplished."

JACADS was the prototype facility for the Army's baseline incineration project designed to destroy the nation's declared stockpile of unitary chemical weapons. Concepts developed and tested at the Chemical Agents Munitions Disposal System (CAMDS) in the Utah desert were integrated into the first fully-operational incineration facility on the remote atoll, some 825 miles southwest of Hawaii. Intense oversight from the EPA, Congress and various others was employed at JACADS in order to ensure the safety of the overall operation prior to implementation on the mainland. JACADS safely destroyed more than 6 percent, or 4 million pounds, of the United States' declared stockpile of 31,500 tons of GB (Sarin) and VX nerve agents and mustard agent.

JACADS closure also was new and established benchmarks for the future sites.

"All roads have bumps in them," said John Beach, EPA's Project Manager for JACADS. "Communication is how you take care of those issues and with this program, this project and this team, they have been able to address issues and overcome them through their communication."

The Army operates plants based on the JACADS design in Utah, Oregon, Alabama and Arkansas. When issues involving environmental permitting

occur, these sites work with state agencies. Without a governing body, JACADS environmental compliance was a collaborative, one-of-a-kind relationship between the Army and EPA's Region IX, and required teamwork and communications across many public and private sector lines.

"There are not that many truly empowered joint teams out there—but this effort was one of them," said Arlene Kabei, Associate Director, EPA Region IX Waste Management Division. "These accomplishments are tremendous, and need to be recognized.

"JACADS was a huge mission and its success is not only that it was accomplished but also how it was done. Thank you—you all—for being great partners. I take a lot of pride in that this last leg was a hard one. What was built over decades was threatened but we persevered. All those involved before us deserve equal credit but this effort will always be one of my own personal career highlights," Kabei said.

Resampling efforts were necessary to provide EPA a very high level of confidence that the Army's facility site complied with the clean closure standards.

"This work presented a number of logistical challenges and safety considerations at the site, which was completely vacated when the airstrip closed following the Army's clean up activities in 2004," explained URS' Project Manager, Marta Green. "A number of options were considered to address a specific data gap, but in the final analysis, CMA's commitment to the regulatory closure process required that 130 samples be re-collected. Therefore, we led a multi-organizational team with CHPPM and SAIC back to Johnston Island, traveling by chartered ship and completing the work over 16 days.

"Critical to our success was having the EPA project manager accompany the team and oversee the work, which left no doubt of EPA's shared commitment to achieving clean closure at JACADS," Green concluded.

"There were a substantial amount of jokes about 'Gilligan' and a 'three hour tour,'" said Robert Malone, SAIC oversight support to the project and part of the resampling effort. "I'm glad I was able to support the Army's clean closure with this final action and that the trip was relatively benign but that too was just another complication in an effort that likely won't be repeated ever again."

"This is a great time to be associated with the demil program," added Mark Evans, President



with Washington Demil Corporation, a subsidiary of URS Corporation. "Today's progress is standing on the shoulders of the pioneers of the past. Places like CAMDS, the BZ folks in Arkansas and now the JACADS project all pioneered the program to the heights we see today."

Evans concluded, "If people share a common objective and commit to it, they can achieve tremendous results without compromising individual principles."

Cheryl Maggio, CMA's Deputy Project Manager for Chemical Stockpile Elimination accepted a ceremonial "Clean Closure" certificate from Kabei in tandem with Bushman.

"Our statement, making chemical weapons history, is defined in what we acknowledge and credit here today," Maggio said. "We are pioneers, you are pioneers. Just being able to work in a program like this is truly a remarkable thing. The path blazed in this effort by all those associated with it will be followed by all the other sites." She ended, "Today is really chemical weapons history being made."

Minor contract close-outs remain, but the physical work of closing JACADS has been accomplished and declared finished with the "clean closure" certification. Hard work is yet to be completed at the other sites. But lessons learned at JACADS are now part of the litany of success of the Army's chemical demilitarization program.

Large footprints have been made for others to fill. The final chapter of the JACADS' pioneers is firmly placed in history.