U.S. ARMY CHEMICAL MATERIALS AGENCY www.cma.army.mil

CMA NEWS | May 2008

CMA PROGRESS AT A GLANCE

as of April 20, 2008:

- **Anniston Chemical Activity, Ala.,** Anniston Chemical Agent Disposal Facility's work force has safely processed 126,152 VX-filled 155mm projectiles and 77,799 gallons of liquid VX since disposal operations resumed in June 2007.
- **Deseret Chemical Depot, Utah,** Tooele Chemical Agent Disposal Facility (TOCDF) has safely disposed of 2,271 mustard agent-filled ton containers and 36,666 mustard agent-filled 155mm projectiles as of April 20, 2008. Mustard operations began in August 2006. On April 11, the Utah Department of Environmental Quality, Division of Solid and Hazardous Waste and the Division of Air Quality, granted TOCDF approval to increase the 155mm projectile feed rates to the Metal Parts Furnace to 100 percent of those demonstrated during the January 2008 agent trial burn.
- **Newport Chemical Depot, Ind.,** Newport Chemical Agent Disposal Facility's work force has safely neutralized approximately 88 percent of the chemical agent VX stored at Newport Chemical Depot. The United States has received credit for destroying 1,927,011 pounds of the Newport stockpile under the Chemical Weapons Convention.
- **Pine Bluff Arsenal, Ark.,** Pine Bluff Chemical Agent Disposal Facility is in a scheduled outage to prepare for VX landmine disposal operations scheduled to begin in early May. The facility has been processing spent decontamination fluid in the liquid incinerator and secondary waste in the Metal Parts Furnace. Operational adjustments on the Mine Handling System (MHS) and Mine Machine were completed and function testing continues. The System Demonstration Plan and dry runs of the MHS were completed the week of April 15-21 and Integrated Operations Demonstrations are ongoing.
- **Umatilla Chemical Depot, Ore.,** Umatilla Chemical Agent Disposal Facility (UMCDF) surpassed three million work hours without a lost-time injury on April 15. The facility has gone nearly two years without a lost work day accident. The milestone marks the second time UMCDF has reached three million safe work hours since 1997, when construction began on the plant. Destruction of VX-filled 155mm projectiles reached the 25 percent mark during UMCDF processing on April 18. The 155mm projectile campaign is expected to conclude this summer.
- **Non-Stockpile Chemical Materiel Project's** Ton Container Decontamination Facility at Pine Bluff Arsenal (PBA), Ark., continues to process ton containers using the thermal decontamination system. More than 400 processed containers were sent to a Treatment, Storage and Disposal Facility for recycling. The Pine Bluff Explosive Destruction System continues to destroy recovered chemical warfare materiel stored at PBA and has completed disposal of more than 86 percent of the total project munitions and more than 71 percent of treaty declared munitions.

CMA'S VINTAGE RAILCAR MUSEUM BOUND

During the 1960s a predecessor agency to the U.S. Army Chemical Materials Agency (CMA) considered creating a mobile disposal facility to move from stockpile to stockpile. The pilot unit would be built at the Chemical Agent Munitions Disposal System (CAMDS) at the Deseret Chemical Depot (DCD) in Utah. But soon after a railcar with twin generators arrived, the mobile concept evolved into a permanent facility. The railcar, however, remained at CAMDS where it served as a backup power supply to the pollution abatement system until 1993.

Throughout the years many workers, like Robert Gordon, who maintained the railcar for most of his CAMDS career, became emotionally attached to the railcar. They feared it would be lost when CAMDS closure activities started in August 2006. Fortunately, the National Historic Preservation Act saved the railcar's caboose. Because of its age and history, said Marty Barth, Environmental Engineer with DCD Risk Management, the railcar was designated as an "important cultural resource" and was deemed eligible to be placed on the National Register of Historic Places.

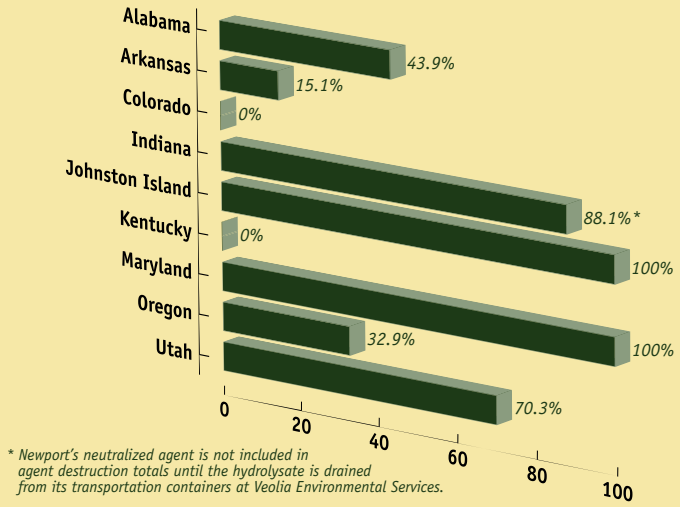
Built between 1927 and 1935, the railcar spent its early years as part of a mobile medical unit that transported wounded soldiers to stateside hospitals during the Second World War and the Korean War.

Cranes hold a vintage railcar - a 30-year resident of Deseret Chemical Depot - in mid-air before loading it for transport to the Utah State Railroad Museum.

Later, the railcar was used by the Air Force before arriving at CAMDS in 1974.

After the railcar was placed on the National Register of Historic Places, CAMDS donated it to the Ogden Union Station, where it will be displayed at the Utah State Railroad Museum. Moving the 90-foot-long, 90-plus-ton railcar approximately 100 miles to its new home was no easy task – taking two days, two massive cranes, two lowboy trailers and a carefully driven semi truck.

CMA - CREATING A SAFER TOMORROW



* Newport's neutralized agent is not included in agent destruction totals until the hydrolysate is drained from its transportation containers at Veolia Environmental Services.

51.8%
OF U.S. CHEMICAL AGENT STOCKPILE DESTROYED

(as of April 20 measured by original agent tonnage since entry into force – April 29, 1997)

GOOD THINGS COME IN SMALL PACKAGES: *New MMAS unit ready for action*

Don't judge the latest Mobile Munitions Assessment System (MMAS) unit by its size. Although roughly half the size of both its predecessors, the latest MMAS features the same proven non-intrusive assessment tools plus a few extra amenities.

The U.S. Army Non-Stockpile Chemical Materiel Project (NSCMP) developed the MMAS to provide detailed information on the contents of recovered chemical warfare materiel. Upon arrival, operators can rapidly identify the contents and condition of the recovered items and gather detailed scientific and photographic information with minimal disturbance to the munition, reducing risks associated with handling the items. The MMAS can travel to all 50 states and be transported by air.

The newest MMAS unit includes features missing from previous versions, such as a hydraulic lift to aid in the unloading and loading of heavy assessment equipment. A single laptop computer can be used to run all the assessment equipment, and custom-designed storage compartments protect equipment and maximize storage efficiency.

"We built upon the success and advantages of the original MMAS units and realized small improvements that matter," said Russell Fendick, Field Operations Group Leader. "This unit's size and accessible tools enable our team to quickly and efficiently respond to assessment missions with minimal effort."

MMAS performs assessments without opening or disturbing a recovered munition using sophisticated devices.

KEY MMAS ASSESSMENT TOOLS ARE:

Portable Isotopic Neutron Spectrometer (PINS): PINS uses gamma rays to identify the elements within a recovered item, sending data to computers that provide comparison and in-depth analysis of the information.

Digital Radiography and Computed Tomography (DRCT): The portable, high-resolution DRCT uses X-ray technology to vertically scan recovered munitions on a rotating platform, producing a digital image of their interiors. The images assist identification of explosives configuration and fill without opening the munition, allowing safe handling.

Raman Spectrometer: The Raman Spectrometer quickly and reliably identifies the contents of chemical agent identification sets (CAIS).

The Mobile Munitions Assessment System provides detailed information about the contents of recovered but unidentified munitions using non-intrusive assessment tools and on-board computers.

A laser and fiberoptic probe provides identification of the contents contained in glass CAIS ampoules, vials and bottles.

Self-sustaining, MMAS can remain on site for months, and serves as a command center, equipment storage area and weather monitoring system. A constant power supply and redundant computer systems providing added data protection in the event of equipment failure. The new MMAS vehicle also meets the more stringent 2007 diesel engine emission standards.

CMA'S RECORDABLE INJURY RATE HITS 0.99

The U.S. Army Chemical Materials Agency's (CMA) five remaining chemical demilitarization plants reached a Recordable Injury Rate (RIR) low of 0.99 for the past year (April 2007- March 2008). The RIR is the number of reportable injuries for every 200,000 hours worked. A score of 1.0 or below is considered "world class" by safety professionals.

"This shows how dedicated our employees are to safety and how hard they are working to minimize accidents. We are getting closer to our goal of a zero RIR. We definitely have a world-class team," said CMA Director Conrad Whyne.

CMA calculates a 12-month rolling average on the basis of safety reporting standards set by the Occupational Safety and Health Administration (OSHA). OSHA requires companies and major facilities to report injuries that meet its criteria for being recordable and reportable, and the Department of Labor's Bureau of Labor Statistics extensively tracks safety statistics. (See the following URL: http://www.bls.gov/iif/oshsum.htm).

Some United States businesses that are in the same range as CMA include insurance carriers (1.1), commercial banks (1.0) and environmental consulting firms (0.9). The difference, however, is that CMA's chemical demilitarization plants are industrial facilities that destroy very hazardous chemical agents and weapons.

CMA facilities go a step further and maintain records of first-aid injuries and near-miss cases. Systems contractor safety managers keep records at each site, which identify unusual safety incidents as lessons learned. This information is shared among plant managers during a routine daily phone call, and often a message advisory is sent to the sites, alerting many more employees of the circumstances surrounding recent injuries. The plant managers also compare safety metrics during monthly operations reviews, and they share experiences on how to maintain safety vigilance and avoid injuries.

Craig Beck, URS Director for Environmental Safety, Health and Quality, oversees the Anniston, Pine Bluff and Umatilla sites and noted, "We have all of these checks in place so that we maintain our high safety standards. As we continue to destroy these deadly weapons, it is imperative to share lessons learned so that all sites can benefit from the knowledge. Teamwork is propelling CMA to finish this important mission."

CMA News is produced by the U.S. Army Chemical Materials Agency Public Affairs Office.
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