The U.S. Army Chemical Corps: Serving a Nation at War, Today and Tomorrow

By Brigadier General Thomas Spoehr
Chief of Chemical

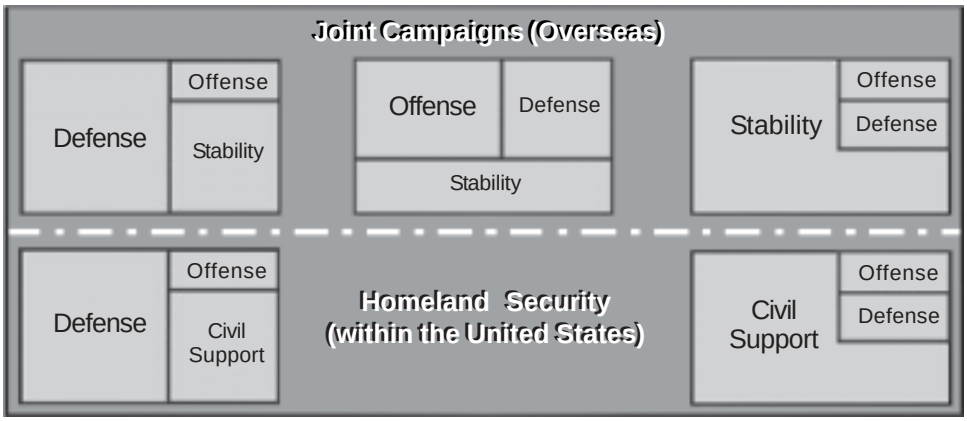
Fellow Dragon Soldiers, as busy as we are, it is difficult for us to pause, step back, and consider how we, as a Corps, are doing in our mission to protect the Army and our Nation. But it is vitally important that we do so. And after we assess our status, we need to ask ourselves where we want to take our Corps in the future and how we intend to take it there.

It's important for you to know, as members of the Chemical Corps, that our Nation is demanding our skills and training now more than ever before in our history. Our President has affirmed that the greatest danger this country faces "lies at the intersection of technology and radicalism." It is at this dangerous juncture that the Chemical Corps brings its unique talents to bear.

As we near the 89th anniversary of the Chemical Corps (in June 2007), I am proud to report that because of your efforts and the efforts of the heroes that have gone before us, our Corps and our capabilities are stronger than ever before. Today, Chemical Corps units and leaders are serving everywhere the U.S. Army is operating—from the sands of Iraq, to the mountains of Afghanistan, to the frozen hills of Korea. Our Active Army enlisted strength recently surpassed 7,000 Soldiers for the first time since 1992, and our total authorized Corps strength exceeds 22,000. The U.S. Army Human Resources Command recently informed us that 47 percent of the Active Army Chemical Corps is either deployed or fenced for deployment reasons.

A graphic illustration of full-spectrum operations from the soon-to-be published FM 3-0, *Operations*. It illustrates the challenge facing the Chemical Corps—the need to be capable of conducting simultaneous CBRN operations in all situations ranging from offense to stability to civil support.

Army forces combine offensive, defensive, and stability or civil support operations simultaneously as part of an interdependent Joint force to seize, retain, and exploit the initiative. They employ synchronized action—lethal and nonlethal—proportional to the mission, and informed by a thorough understanding of all dimensions of the operational environment. Mission command that conveys intent and an appreciation of all aspects of the situation guides the adaptive use of military forces.



Full-spectrum operations—the Army's operational concept

Over the next few years, vast organizational changes will sweep through the Chemical Corps. We will modularize most of our units, resulting in more capable and adaptable formations (such as combining decontamination; chemical, biological, radiological, and nuclear [CBRN] reconnaissance; and biological surveillance in the same unit). In September 2007, we will activate our first-ever Active Army modified table of organization and equipment (MTOE) Chemical brigade, the 48th Chemical Brigade, at Fort Hood, Texas. This brigade is poised to assume command and control (C2) over all Active Army MTOE Chemical battalions and separate companies. The 48th will be subordinate to the 20th Support Command (Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives [CBRNE]). The 22d and 110th Chemical Battalions (Technical Escort) will be redesigned to make them more capable of worldwide deployment and C2 functions in operational and tactical level weapons of mass destruction (WMD) elimination operations. Our Special Forces Chemical Reconnaissance Detachments are larger and better able to perform their important missions. Chemical staffs, in warfighting formations from battalion to Army level, have been redesigned to optimize their abilities. A total of 55 WMD civil support teams (CSTs) (enough for one in every state and territory and two in California) have been activated and are on track to soon be 100 percent certified and deemed ready for operations by the Secretary of Defense. The 20th Support Command (CBRNE), an organization which will provide C2 for most Active Army Chemical forces, has been reorganized and tasked with increased capabilities to act as a Joint Task Force and conduct WMD elimination operations.

Our U.S. Army Reserve (USAR) and Army National Guard (ARNG) formations are also undergoing monumental changes. Due to the results obtained from the Army's last force structure analysis, we are slated to lose four brigade headquarters in the Total Force. We will retain at least two others in the force structure—one in the USAR and one in the ARNG. The USAR brigade, the 415th Chemical Brigade, will be the primary focal point for all Chemical units in the USAR. The ARNG will retain the 31st Chemical Brigade to serve as the lead Chemical organization in the ARNG. Other USAR and ARNG Chemical units will also change in the same manner as our Active Army units.

Selected USAR Chemical companies have been fielded. These companies have specialized equipment that enables them to support domestic CBRN reconnaissance, extraction, and casualty decontamination. The Stryker Nuclear, Biological, and Chemical Reconnaissance Vehicle (NBCRV), the most advanced and capable CBRN reconnaissance platform in the world, is being fielded to Chemical units and is on the cusp of a full-rate production decision. After years of setbacks, the Joint Warning and

In order to achieve our vision, we must better equip and train our general-purpose Chemical Corps units to be able to combat the full range of CBRN hazards. Our recent Joint CBRN Dismounted Reconnaissance Limited-Objective Experiment confirmed that this concept of equipping general-purpose forces with advanced detection and identification equipment is viable.

Members of a WMD-CST on a training mission

The 329th Chemical Company was given missions to perform convoy security and hazardous material response operations. This type of flexibility will be essential for the future Chemical Corps.

Brigadier General Spoehr and Regimental Command Sergeant Major Alston with members of the 329th Chemical Company, Camp Victory, Iraq, in November 2006

Reporting Network (JWARN) and the Joint Effects Model (JEM), the most capable CBRN hazard warning and analysis tools ever developed, are scheduled to be approved for full-scale fielding to the Joint Force.

We have formed partnerships with the explosive ordnance disposal (EOD) community. EOD officers and noncommissioned officers are embedded within the CBRN sections of major warfighting unit staffs, making our organizations capable of total CBRNE operations. All courses at the U.S. Army Chemical School and position titles within the Corps have been renamed from "Chemical" to "CBRN" to more accurately reflect the skills and capabilities we bring to the fight.

Great initiatives are underway at the Chemical School and in the field to increase the support we provide the force. Training on equipment that can detect and identify the full range of CBRN hazards has begun in certain courses at the Chemical School and is taking place in selected units. Selected Chemical Corps personnel are extending their competencies into areas of countering WMD operations (including consequence management, nonproliferation, and elimination).

When viewed in its totality, the improvements that the Chemical Corps and the Nation have made to counter CBRN attacks are dramatic. So the question is: Where do we go from here? We go where we need to. Much work remains to be done.

In Proverbs 29:18, we are advised that "where there is no vision, the people perish." With your assistance, we have developed and approved a new Chemical Corps Vision (see also the inside back cover). A successful Vision must be believable, positive, and appealing to all members of the community. Our new Vision meets these goals and is a great beacon to guide future efforts. The approval of our Vision is just the start. What must follow—for the Vision to hold more value than just another document hung in the lobby—is our plan to achieve that Vision. For the rest of this article, I would like to address the major strategies that we will use to implement our Vision.

In "countering the entire range of CBRN threats and effects," Chemical Corps Soldiers must—

- Develop new doctrine and tactics, techniques, and procedures (TTP).
- Receive enhanced equipment.
- Institutionalize the necessary training to respond to full-spectrum hazards.

Chemical Corps Soldiers are generally proficient in the use of standard detection and identification systems

A Corps and Army capable now of countering the entire range of CBRN threats and effects to protect our Nation, operating seamlessly with military and civilian partners, while conducting simultaneous operations from civil support to war.

Chemical Corps Vision

like the Automatic Chemical-Agent Detection Alarm, Improved Chemical-Agent Monitor, and AN/VDR-2 Radiac Set. Some specialized units have more advanced capabilities; however, as a Corps, we generally lack the necessary equipment to detect, identify, sample, and protect ourselves against the complete family of emerging threats (such as toxic industrial chemicals, specific radiological isotopes, and others). Most of the equipment necessary to respond to these hazards is available in the form of commercial, off-the-shelf equipment (which leverages cutting-edge technology such as Raman spectroscopy). The Chemical School is actively working with the Joint Chemical and Biological Defense Program to rapidly acquire this equipment and field it to specified units, including Chemical companies and reconnaissance platoons in Infantry brigade combat teams and Special Forces Chemical Reconnaissance Detachments. However, without the appropriate training and doctrine, we won't have a full capability; these training efforts must be integrated with all equipment fielding plans. We must fully integrate this equipment into our courses, alongside the training on our current equipment, not segregated and placed in "special" blocks. Sustainment training in units will be an initial challenge, but we must resist the temptation to rely on mobile training teams from contractors or manufacturers to sustain our skills. This is a unit responsibility and manageable by unit cadre when properly trained and supplied with the necessary training materials.

As Dragon Soldiers, we must also understand the basic science that underlies CBRN hazards. Our initiatives to increase education in this area must continue. Chemical Soldiers in the field must also have a clearly identified, reliable, 24/7 reach-back mechanism for technical advice and assistance. Our recently concluded memorandum of agreement with the Edgewood Chemical and Biological Center will assist us with these initiatives by giving us access to a group of professionally credentialed scientists. We are working on a similar agreement with Dugway Proving Ground.

To achieve our goal of "operating seamlessly with military and civilian partners," we must thoroughly understand the differing standards and procedures that govern domestic and warfighting CBRN operations and the capabilities of the organizations tasked to respond to either situation. Domestic operations are governed by federal statute and regulation and are characterized by almost zero willingness or ability to accept risk to either civilians or responders. Chemical Soldiers must completely understand the procedures, the differing technical terms and language, and the manner in which domestic-response operations are conducted. Our Chemical School must provide the necessary initial certifications and training in this area. But we must be capable of making a concurrent transition to countering WMD missions in wartime environments where our actions are normally not governed by law or regulation, but rather by the

The U.S. Army Chemical School must produce adaptive, technically qualified Dragon Warriors ready for the challenges to respond to all situations ranging from homeland security to war.

Above, initial-entry Soldiers in Chemical Advanced Individual Training; right, Chemical lieutenants in training

application of Joint and Army doctrine. And a certain level of risk must usually be accepted in order to ensure mission accomplishment. This movement along a sliding scale of law, regulation, doctrine, risk acceptance, and differing priorities is a difficult concept to master but is absolutely critical for us to succeed. Our equipment must be flexible enough for all mission sets. The concept of maintaining one set of equipment for wartime and another for consequence management in the continental United States is unmanageable and unacceptable. Equipment requirements must be fully integrated.

We must work more closely with other military forces that have capabilities in CBRN response. An excellent start in that endeavor is conducting more Joint-oriented training activities with Marine Corps, Navy, and Air Force personnel training at Fort Leonard Wood, thus capitalizing on similar training requirements for equipment and missions. Closer relationships with other friendly nation CBRN forces are also crucial for future coalition success.

Nowhere has the importance of "conducting simultaneous operations from civil support to war" been more vividly demonstrated than in current operations in Iraq where, in one province, the Army is able to focus on helping the Iraqi people establish a functioning government while, one province away, offensive operations are underway. Similarly, Chemical Corps units and Soldiers must be trained, equipped, and ready to conduct C2 concurrent with counter-CBRN missions that run the gamut from support to civil authorities, to WMD elimination, to nonproliferation efforts, to the non-negotiable mission of protection and support of our Army in the face of a CBRN attack. This is a huge challenge that requires the development of doctrine and training programs to enable this type of flexibility. Our training in the institutional base, in units, and in self-development initiatives must broaden to incorporate these missions. Additionally, we must develop adaptive leaders who are comfortable moving smoothly between differing missions. Demonstrating their flexibility, Chemical Corps units are often called upon to perform missions other than those dealing with CBRN operations. We must maintain our competencies as "Soldiers first" and be ready to respond when the Army calls us in that manner.

As our Vision begins, I bring this article to a close with the challenge for our Corps and Army to be capable now! That is the logical conclusion when one considers the threats we face at home and abroad. We will not have the luxury of months of training and preparation before we are called upon to protect our Nation. The Chemical Corps must maintain itself, its units, and the Army in constant readiness against CBRN threats. This implies a consistent level of emphasis and places a burden on all of us to be relentlessly uncompromising in our drive to protect our Army and Nation through CBRN defense readiness.

Our Vision is powerful! We have charted a course toward increased CBRN protection and response for the Army and our Nation. I ask for your support to continue to advance our Vision and goals. And as always, I remain open to your ideas and suggestions. Command Sergeant Major Alston and I could not be more proud to serve as the leaders of your Regiment. Take care of any and all Dragon Soldiers that you can. We hope to see you during Regimental Week, 24–28 June, to celebrate the 89th anniversary of the Chemical Corps.

Elementis, Regamus, Proelium!

In all respects, we must ensure that our training base prepares CBRN Soldiers for success by providing them with the best training possible.

Chemical lieutenants boarding a UH-60 helicopter to conduct a training aerial radiation survey