



AUSA BACKGROUND BRIEF



CHEMICAL WEAPONS

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The use of chemical warfare munitions in the Gulf War between Iran and Iraq highlighted the dangers associated with continued proliferation of these insidious weapons. As such weapons become easier to produce or to obtain, it should come as no surprise that perhaps 20 or more nations now possess, or have the means to produce, chemical weapons. The muted international reaction to proven Iraqi gas attacks on Iranian forces—and on its own Kurdish minority—can only increase the attraction of chemical weapons in the eyes of dozens of countries around the world that are presently involved in military conflicts.

What Are Chemical Weapons?

Modern chemical weapons generally consist of either nerve, blood or blister agents. Each type of agent is absorbed into the body differently and affects different organs. Some chemical agents will cause only minor incapacitating effects, such as dizziness and nausea, while others can cause death within minutes after contact. Chemical weapons are also categorized by the length of time they remain effective in a particular area. "Dissipating" agents will only remain effective for hours or maybe days, while "persistent" agents can remain deadly for weeks or longer. Chemical weapons can be delivered to the battlefield by several methods including, artillery shell, rocket, long-range missile, and bomber aircraft.

Chemical weapons are relatively simple and inexpensive to make. Many of the chemicals used in their manufacture are similar or identical to the chemical compounds used to make pesticides, fertilizers, paints and inks. Not surprisingly, it has proven extremely difficult to control the international transfer of chemical weapons production, technology and components.

The Poor Man's Atomic Bomb

What concerns the United States is not simply the proliferation of chemical weapons technology but the combination of spreading that technology and the easy availability of long-range missiles. Any nation able to manufacture chemical fertilizer could probably produce chemical weapons. Similarly, only a few technical adjustments are necessary to arm a Soviet-made SCUD-B or Chinese-made Silkworm missile both readily available on the international arms market with a chemical warhead capable of reaching targets several hundred miles away.

The spread of chemical weapons and long-range missiles has, in effect, created a "poor man's atomic bomb" and many second and third world nations, including several hostile to the United States, are interested. If the thought of Libya's Col. Muammar Qaddafi's possession of a long-range chemical warfare capability seems disconcerting, the possibility that terrorist groups might be provided with such weapons is downright terrifying. The proliferation of chemical weapons, along with long and medium-range missiles, by nations such as Libya, Syria and North Korea increases the likelihood that the United States and its allies may one day face the specter of chemical blackmail.

United States Chemical Policy

Current United States policy is to modernize our chemical warfare capability while simultaneously negotiating with the Soviet Union for an agreement to eliminate all chemical warfare weapons.

The Soviet Union maintains the world's largest stockpile of modern chemical munitions and actively incorporates the employment of these weapons in their military operational doctrine. After decades of denying it had any chemical weapons, the Soviet Foreign Ministry announced in December 1987, that its chemical weapons stock amounted to no more than 50,000 tons. Many U.S. experts dispute this figure saying the actual total is orders of magnitude larger.

In contrast, the United States has an obsolete supply of rapidly decaying chemical weapons, produced before 1969, when we unilaterally halted all production of chemical weapons. Total U.S. worldwide holdings of chemical agents is approximately 30,000 tons. The United States is preparing to destroy this aging stockpile, (between 4,300 and 7,300 tons have been destroyed since 1974) as approximately 10 percent of it is considered militarily usable today. (18 percent has "limited value," 11 percent is in defective or obsolete munitions and 61 percent is unweaponized.)

In the meantime, Congress has authorized the production of a new "binary" chemical weapon which, as the name implies, consists of two relatively harmless chemical compounds that would only become lethal when they are combined en route to the battlefield target. These munitions would be far safer to store and transport than their volatile unitary predecessors, and would remain usable for a longer time. The modernization effort will eventually result in a far smaller U.S. chemical weapon stockpile, as several times as many old weapons (and tons of agent) will be destroyed under the program than will be produced.

Why New Chemical Weapons?

The United States government has elected to reactivate its long-dormant chemical weapons production capability for several reasons. First, the seventeen-year unilateral moratorium on chemical weapons production did not elicit the desired reciprocal response from the Soviet Union and was ineffective in deterring the proliferation of chemical weapons to other nations. In fact, 15 or so nations either have or are developing chemical weapons, while perhaps another six or more are reportedly attempting to acquire them. In addition, the Soviets have continued to expand and modernize their chemical warfare capability while maintaining their right to retaliate in kind if attacked. Second, many of our leaders have expressed the conviction that there will be no progress in the Geneva negotiations with the Soviets over the elimination of chemical weapons until the Soviets are faced with a credible U.S. retaliatory chemical capability. Finally, the production of new binary chemical weapons by the U.S. is imperative since the absence of a verifiable treaty on chemical weapons leaves the U.S. without an effective deterrent to the overwhelming Soviet chemical warfare advantage.

The sparse attention given to Iraq's use of chemical weapons and the dangers associated with the proliferation of chemical production technology are both serious problems with which the United States and its allies must come to grips. The recent evidence of a new Libyan plant capable of large-scale production of chemicals for weapons use has created major concerns and has refocused world attention on the issues relating to chemical weapons and their use.

President Reagan highlighted the chemical warfare issue in a September 1988 address to the United Nations when he called for a renewed global commitment to the 1925 Geneva Protocol prohibiting the use of chemical weapons. The United States, the Soviet Union and 119 other nations, including Iraq, have signed the agreement. Unfortunately, no system of penalties has ever been devised for signatory nations which violate its terms.

The Paris Conference on Chemical Weapons held in January 1989, attended by 149 nations, did little more. Its primary achievement was a declaration, signed by the participants, reaffirming the 1925 Geneva Protocol. The five-day conference ended with a call for a new pact to outlaw the production and storage of such weapons and a declaration of support for United Nations' investigations of suspected chemical weapons use.

Meanwhile, U.S. negotiators continue to talk with their Soviet counterparts in Geneva to produce a verifiable treaty which would eliminate, or at least reduce to minimum necessary deterrent levels, the stockpile of chemical weapons.

Although some progress is being made, it is imperative that the United States develop a replacement capability for the old weapons it is voluntarily planning to decommission and destroy. Because, if the talks in Geneva prove unsuccessful, the United States and our allies cannot afford to be confronted with an offensive chemical warfare threat while lacking a credible means of deterrence.

APPENDIX

COUNTRIES WHICH HAVE (OR ARE SUSPECTED OF HAVING) CHEMICAL WEAPONS OR PRODUCTION FACILITIES

POSITIVE OR STRONG POSSIBILITY		SUSPECTED
FRANCE	TAIWAN	LIBYA
UNITED STATES	VIETNAM	SOMALIA
SOVIET UNION	BURMA	CUBA
ISRAEL	IRAN	CHILE
EGYPT	IRAQ	PAKISTAN
ETHIOPIA	SYRIA	THAILAND
CHINA	AFGHANISTAN	SOUTH KOREA
NORTH KOREA		SOUTH AFRICA

(Prepared by the Institute of Land Warfare with information current as of February 1989)