The safety of Russia's citizens depends heavily on whether the government will begin destroying its chemical weapons. 1996 raises this question for the country's rulers: will they agree to destroy chemical weapons in accordance with the international convention, which bans the development, production, storage, and use of such weapons?

Chemical Weapons: Costly to Produce, Costlier to Destroy

"I have a few photos showing the aftermath of a gas attack during the Iran-Iraq conflict. They're frightening: mounds of corpses with horrific wounds; dead infants lying in the dust by the roadside. These weapons should truly be banned!" Colonel-General Stanislav PETROV said this in an interview with Vladimir ORLOV of *MN*. General Petrov is head of the troops for radioactive, biological and chemical defense (of the Russian Ministry of Defense). It's rare that a military man shows such emotion. Even more unique, however, is the fact that the interview took place at all, the military not ordinarily inclined to share their plans.

MN: A government resolution was passed in 1993 on the levels of secrecy concerning information on chemical weapons. Is it needed today?

S. P.: That resolution relates to the security of secrets about the development and production of chemical weaponry. I have a positive attitude toward it because it's in accordance with the spirit of the convention. You know that the Aum Shinrikyo sect in Tokyo used the know-how and experience of a senior grade lieutenant in the Japanese army... I believe that a fifth-year student at the Moscow Institute of Chemical Technology, given the laboratory equipment and, most importantly, a fume cupboard for protection against toxic substances, could synthesize sarin and soman. Obtaining the necessary materials would probably be the biggest problem.

The technological chain of a poisonous substance is the main thing needed to synthesize it. The rest is easy. And there are governments, especially those of the Arab world, that haven't signed the convention's compact because they link its ratification to Israel's possession of nuclear weapons.

Before, the location of the chemical weapons arsenal was a great secret; these weapons were transported all over the country and no one knew about it. There wasn't a single accident because special safety procedures were in use.

Is that why the ministry of defense is so hostile to those wanting to visit chemical weapons' storage sites?

Now, when all sorts of problems come up, we're against telling a large number of people how and where we store chemical weapons. We don't like it when outsiders try to get to these sites by hook or by crook. Are they some kind of exhibit? Every such exhibit only gives ever greater numbers of people access to information on the security system at these sites. All kinds of things can come of this. Some fail to realize that the less you know, the better you sleep.

You said that you're troubled by the failure of Middle East governments to sign the international compact. A few parliamentarians are concerned about the same thing — opposing the convention.

Research of toxic and supertoxic substances is done continually; it can stop no more than can studies in new medicines. Therefore, we can't dismiss the possibility of some new form of chemical weaponry appearing in the arsenals of some countries. There are governments that do not possess the materials today, but could begin production in six to eight weeks.

When we talk about the amount of chemical weapons to be destroyed, we're using the official count of 40 thousand tons. However, a figure ten times greater, 400 thousand tons, was quoted in the Duma. A number of serious specialists speak of 100-150 thousand tons.

400 thousand tons isn't realistic. Such an amount was never produced in Russia. We have a supply of 40 thousand tons, and we couldn't hide this figure now even if we really wanted to.

As for the figure of 150 thousand tons, one should have a basis for making such a statement. One would have to mount a huge search in the archives to arrive at such numbers. Poisonous substances were actively produced in the times of Beria, Stalin's head of secret police who used slave labor to produce those weapons in total secrecy and "spy mania." Even now it's impossible to make any sense of the archives, to track anything there. A special group needs to be formed with the required funding.

The funding for the destruction of chemical weapons was discussed in a session of the government's operations committee, chaired by First Vice premier Oleg Soskovets. In the end, how much was set aside for the ministry of defense?

It was decided to allocate not less than 500 billion rubles to the Ministry of Defense's program for destroying chemical weapons, whereas we had asked for 537 billion. The finance and economics ministries are talking of allocating a mere 146 billion. In that case, we simply can't make the government program's timetable.

The draft law on the destruction of chemical weapons envisages funding not only from the state budget, but from other sources as well, including aid from foreign governments and private capital.

There hasn't been any real aid yet from the United States. The only thing they participated in was a joint experiment, and we had to go to great lengths to get them to do that. Even then, they agreed only in the hope of being able to use the experiment's results somehow. "If you like the technology," we say to them, "then support it. We will give it to you as the experiment's equal partner in return for an outfitted factory in one of the arsenals: say, in the Kurgan region in Shchuchye." The Americans only agree to help on all sorts of conditions, and the whole thing turns out to be the "pumping" of knowledge about Russia's military-chemical potential in exchange for American money. It's very hard to work with them.

It's a lot easier with the Germans. They don't make any conditions; just ask for an account (bringing in German audit companies) of where the money's gone, and that the money be used for the destruction of chemical weapons. They've already given some 15 million marks' worth of aid, and are planning to give another 9 million in 1996. With this money we were provided with laboratory equipment and mobile laboratories for monitoring the environment.

The government of the Netherlands is considering giving Russia 30 million guldens in aid. We're committed to provide them with any information on the processing of lewisite, and they will determine the amount of aid on the basis of this information.

The Dutch went to Kambark, Udmurtia, to view the construction site where terminals and a factory are planned to be built for processing chemical weapons. We hope to sign an inter-government agreement with them.

1997 is the expiration date for chemical ammunition. Can you ensure safety until the ammunition is destroyed?

I wouldn't say that the expiration date is 1997 for all stocks. The expiration date is determined by the possibility of using the ammunition in a real-life situation. But even after that expiration date, specialists will work on defining the usability of ammunition. So it's not a question of the decommissioning of chemical ammunition on a mass scale in the next 5-10 years. Although I'm a military man and head of the Agency of Chemical and Biological Defense, I have no doubts on the issue of whether chemical weapons should be destroyed. Of course, they should!

Chemical Weapons at Russian Storage Bases (1994)

Storage base	Chemical weapons (%)	V-gas	Sarin	Soman	Mustard gas	Lewisite	Mixtures of mustard gas and lewisite	Phosgene
Pochep, Bryansk region, air base	18.8	+	+	+	-	-	-	-
Maradykovsky, Kirov region, air base	17.4	+	+	+	-	-	+	-
Leonidovka, Penza region, air base	17.2	+	+	+	-	-	-	-
Shchuchye, Kurganskaya region, artillery base	13.6	+	+	+	-	-	-	+
Kizner, Udmurtia, artillery base	14.2	+	+	+	-	+	-	-
Kambarka, Udmurtia, chemical base	15.9	-	-	-	-	+	-	-
Gorny, Saratov region, chemical base	2.9	-	-	-	+	+	+	-

Taken from "Arms Control Today" July/August 1995. "The Undeclared Chemical War in Russia Politics vs. Ecology" by Lev Fyodorov

Those Aging Poisons Still a Danger

The difficulties in chemical disarmament are due not only to lack of funding and politicians' indecisiveness, but also inadequate international legislation.

By Maria KATSVA,
Moscow News

The view is often expressed that the main problem hindering the destruction of chemical weapons is insufficient funding. Of the planned 38,308,500 rubles for 1994, only 12,350,000 (32.2%) have been allocated; and only 153,800,000 rubles, a small part of the needed funding for 1995, have been set aside for that purpose. Improvements in security systems for storing chemical weapons were cut from the 1995 government order. As a result, not a single inspection of chemical ammunition storage sites was made in 1993 or 1994, and now it's doubtful that anyone has an exact idea of the present state of the ammunition.

Indications are that the situation is far from satisfactory. Tons of poisonous skin-infecting substances, produced in the 30s and 40s, are stored in huge containers that were placed in storehouses in the 1950s. These containers are in desperate need of major repairs. The time limits for storing some of the artillery and aviation ammunition have expired. No money has been set aside for developing the infrastructure of regions where chemical weapons are stored, so relations with locals are strained at a time when cooperation is needed to construct factories for destroying weapons.

But are things in such a state only because of inadequate funding? It's already common knowledge that Russia holds the largest arsenal of chemical weapons in the world, officially said to comprise 40 thousand tons of poisonous materials. Of these materials, phosphoric poisons of a nerve-paralyzing nature (sarin, soman, and VX-gas) make up about 32.3 thousand tons, with 7.7 thousand tons being "old" materials (lewisite, mustard gas, and their combinations). However, according to the prominent chemist Academician Irina Beletskaya, and Sergei Novikov, Doctor of Physics and Mathematics, these numbers are considerably lower than the actual ones.

No one can say how many weapons were produced and then sunk or buried. Due to the policy of total secrecy in the Soviet-style command, factories in Chapayevsk and Novocheboksarsk, revamped for destroying chemical weapons, are still closed to the public. Now American military commanders know significantly more about Russia's chemical weaponry than the populace of regions where those weapons are to be destroyed.

Those who work on the liquidation of weapons and the development of required technology, program managers and directors of military institutes, are people who have spent their whole lives developing and creating these weapons. Their efforts have been rewarded by the government: the Lenin award was given to Anatoly Kuntsevich, the former chairman of the conventional committee, and Viktor Petrunin, director of a research institute of organic chemisry and technology, for creating binary weapons. It's hard to imagine that these people are now attacking the problem of destroying weapons with the same ferver as they created them.

The 1993 convention completely failed to mention components of binary chemical weapons, and that was one of the reasons for the Duma's refusing to ratify it in March, 1994. The proper additions were made to the corrected version of the convention in August of 1994. A binary chemical weapon of mass destruction works by synthesizing a poisonous substance from two or more nontoxic substances during the process of the weapon's firing. The toxic value of the new generation of poisonous substances of the nerve paralyzing type is higher than that of the V X type of substance by five to eight times. The fate of this poisonous substance, for which there is no antidote or treatment, is yet to be decided.

Voices are heard more and more frequently claiming that Russia should maintain its own scientific arsenal for researching poisonous substances in the interests of national defense. It is but a short step from experimentation to the creation of new, more powerful weapons under the aegis of state security.

Right now it's doubtful that the Duma's deputies, busy with their own political struggles, will find time to determine the boundary separating scientific research for defense and research for developing new types of weaponry.

This article has been abridged. It can be found in its entirety in the magazine "Nuclear Control".