

**CHEMICAL WEAPONS CONVENTION
(TREATY DOC. 103-21)**

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BEFORE THE
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UNITED STATES SENATE
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it is use, not possession, of such weapons that is the fundamental problem faced by the nations of the world.

Let's look at a specific example. When the Iraqis used chemical weapons against Iran, the international community was horrified. The "international norm" against that use was as strong as it has ever been. Yet the international community was still not able to figure out what to do about it. No sanctions were ever imposed; no resolutions were ever passed condemning that use; nothing was ever done about that treaty violation except to increase the arguments by some that if that treaty had failed, another treaty should be concluded.

The logic of this escapes me. If "international norms" were not strong enough to effectively isolate or punish a country whose violations resulted in the death of a significant number of people, what makes us think that the "international norms" would be strong enough to prevent or punish the violator of a new treaty which involved only the possession of a prohibited weapon? This so-called solution is an exercise in escapism. It cheapens the currency of arms control as well as avoids the real problem.

That real problem is what to do about violators. We clearly haven't solved that problem, either nationally or internationally. Witness the situation in North Korea today relative to the nuclear non-proliferation treaty.

Unless we resolve the broader issue, in my view the Chemical Weapons Convention is worse than meaningless. It's a pretense. This is the foreign policy matter which should be addressed by this Committee.

Thank you for your attention.

STATEMENT OF MATTHEW MESELSON, DEPARTMENT OF BIO-CHEMISTRY AND MOLECULAR BIOLOGY, HARVARD UNIVERSITY, CAMBRIDGE, MA

Dr. MESELSON. Mr. Chairman and Senator Lugar, I am privileged to appear in response to the committee's invitation to comment on the Chemical Weapons Convention.

Let me say at the start that I believe the Chemical Weapons Convention will enhance the security of the United States and that it merits strong Senate support and timely ratification.

In evaluating the Convention, it is important to consider U.S. national security interests across the full range of chemical and biological weapons.

This is because these weapons form a continuous spectrum, from presently stockpiled chemicals, through toxins to infectious agents of disease; from the temporarily incapacitating to the highly lethal; and from weapons with only a short range of action to weapons that could attack whole populations.

It is within the capability of nearly every nation, and even of some dissident or criminal groups, to acquire powerful chemical and biological weapons.

The principal barrier to proliferation is not cost. And it is not technical complexity. It is military convention and the prevailing norm that holds the hostile use of poison and disease to be abhorrent.

The fact that CBW weapons are considered to be unconventional and abhorrent is a valuable U.S. security asset that should be carefully preserved and strengthened. There are two principal reasons why this is so.

First, proliferation of CBW weapons would endow many states, and even terrorist groups, with the capability to threaten the United States and its allies with a level of violence much greater than that which is otherwise accessible to them.

Second, the use of CBW weapons in local and regional conflicts in which the United States and its allies are not initially involved

could nevertheless provoke military escalation and extreme political instability eventuating in the commitment of U.S. military forces and their exposure to CBW weapons.

Simply put, a rich nation like the United States should seek to maintain and strengthen the barriers against the proliferation of cheap weapons of mass destruction.

Twenty-five years ago, U.S. policy depended on possession of chemical and biological weapons as a deterrent to their use by others.

At that time, however, the policy began to change as a result of extensive interagency study and review which concluded, among other things, that like-for-like deterrence does nothing to prevent proliferation and, if anything, encourages it.

I will now skip part of my testimony in order to save time.

The CHAIRMAN. The full text will appear in the record as if read.

Dr. MESELSON. Thank you, Senator.

Now, for the first time in the progression of steps to abolish the threat of CBW weapons, the Senate has before it a global treaty that prohibits development, possession, and transfer of chemical weapons and includes measures for verification, penalties for non-compliance and, perhaps most importantly, a standing political committee of states parties with a full-time professional technical secretariat to oversee compliance with the provisions of the treaty.

The verification provisions of the Convention, especially those for short-notice challenge inspection, are substantial and unprecedented.

Considerable debate has centered on attempting to quantify their effectiveness. Some individuals with relevant experience are optimistic. Others are not.

Until the Convention has operated for a time, the debate is unlikely to narrow. At a minimum, however, the Convention's verification provisions will add significantly to the ability of U.S. intelligence agencies and the world community to detect and verify violations and to distinguish between violations and false alarms. I believe that has also been the burden of the testimony that this committee has heard earlier from the intelligence community.

This, together with the political and moral force of a global agreement to outlaw chemical weapons, will act to deter violations and false accusations, maybe not enough to prevent all of them, but certainly to deter them, and to break the cycle in which some nations might seek CBW weapons out of concern that others are doing so.

Finally, and this is most important, the Convention will give the President of the United States an increased range of mechanisms and options for dealing with suspicions, allegations, and violations.

Weighed against these considerable benefits, the costs and limitations of the Convention provide no basis for withholding the advice and consent of the Senate to its ratification.

While strongly supporting prompt U.S. ratification of the Chemical Weapons Convention, there is an issue that gives me and many others serious concern.

This is the risk of any explicit or implicit Senate endorsement of an erroneous treaty interpretation that creates a loophole for states to develop, test, produce, stockpile, transfer, and sell chemical

weapons in any quantity and of any type based on chemicals that, in the opinion of such states, are temporarily disabling rather than lethal, either those chemicals presently used for riot control or more powerful, so-called riot control agents yet to emerge from the laboratory.

Some U.S. officials who have appeared before this committee have suggested that the Convention's only restriction on "riot control agents," as that term is defined in the Convention, is that they should not be used as a method of warfare.

If this claim were true, these disabling chemical weapons would be entirely exempt from the Convention's prohibitions on development, production, stockpiling, and transfer.

For example, states would be free to develop and accumulate stockpiles of bombs or artillery projectiles loaded with so-called temporarily acting disabling agents, stockpiles whose only plausible use would be in war.

Each state could decide for itself what agent and munitions to stockpile. If exempt from the types and quantities requirement of the Convention, there would be little more protection for the United States against such eventualities than the self-restraint of other states.

Indeed, large quantities of exactly such munitions were used in World War I and were stockpiled by both sides in World War II. Riot control agents were extensively used in the Iraq-Iran war.

And after the Gulf war, the U.N. Special Commission found that approximately half of Saddam Hussein's chemical arsenal consisted of large caliber mortar projectiles loaded with riot control agent CS.

In war, riot control agents are used to drive personnel from protective cover into the line of ground fire or bombing, to disrupt their operations and otherwise as multipliers of lethal force.

History and common sense makes it absolutely clear that riot control agents can be, depending on how they are used and in what quantities, chemical weapons of war.

In fact, the claim that riot control agents are exempt from all parts of the Convention, except its prohibition against actual use as a method of warfare is incorrect, unnecessary for preserving virtually all of the presently permitted U.S. uses of riot control agents and, in fact, dangerous to U.S. security.

Riot control agents are not exempt from the treaty. The status of riot control agents is clearly spelled out in article II of the Convention.

They are defined as: "Any chemical not listed in a schedule, which can produce rapidly in humans sensory irritation or disabling physical effect which disappear within a short time following termination of exposure."

This would include, for example, the widely used irritant CS, and also, if present development programs succeed, powerful opioid chemicals intended to cause temporary paralysis, and other chemicals intended to cause temporary disorientation.

Every riot control agent, as defined above, is also a "toxic chemical" as that term is defined in the Convention as: "Any chemical which, through its chemical action on life processes can cause death, temporary incapacitation—" and that is what includes riot control agents—"temporary incapacitation."

In other words, "riot control agents," as defined in the Convention, are "toxic chemicals."

The definition of the Convention of "chemical weapons," to which all of its prohibitions of development, possession, and transfer apply, is "toxic chemicals and their precursors, except—" and this is the key to the entire Convention—"except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes."

It follows that the status of riot control agents, like any other toxic chemicals and munitions designed for their delivery depends on the intended purpose, so long as their types and quantities are consistent with that purpose.

The Convention's definition of chemical weapons, based on purpose rather than on the chemical identity of a subject, underlies the entire Convention.

It enables the Convention to deal with dual-use chemicals, chemicals having peaceful uses, and which is true of almost all chemicals, and with chemicals that have not yet been discovered, protecting peaceful uses and accommodating the inevitable advance of science.

The specific inclusion of "riot control purposes" in the list of purposes permitted by the Convention simply underscores the fact that riot control agents are subject to the same definition of chemical weapons as any other toxic chemicals.

Moreover, virtually all present permitted uses of riot control agents are permitted by the Convention.

The Convention's list of purposes that are permitted specifically includes: "Military purposes not connected with the use of chemical weapons and not dependent on the use of toxic properties of chemicals as a method of warfare."

And also another permitted purpose: "Law enforcement and domestic riot control."

Thus, the use of riot control agents for virtually all uses permitted by U.S. policy is permitted under the Convention.

For a more specific discussion of what is permitted, I would request permission of the committee to include in the record, a paper by Abram Chayes, myself, and R. Justin Smith entitled "Proposed Guidelines on the Status of Riot Control Agents Under the Chemical Weapons Convention."

Thank you.

The CHAIRMAN. Thank you very much.

[The prepared statement of Dr. Meselson follows:]

PREPARED STATEMENT OF DR. MESELSON

Mr. Chairman and members of the Committee, I am privileged to appear in response to the Committee's invitation to comment on the Chemical Weapons Convention, signed by the United States and 156 other countries and submitted to the Senate for its advice and consent to ratification.

Let me say at the start that I believe the Chemical Weapons Convention will enhance the security of the United States and that it merits strong Senate support and timely ratification.

In evaluating the Convention, it is important to consider U.S. national security interests across the full range of chemical and biological weapons. This is because these weapons form a continuous spectrum—from presently stockpiled chemicals through toxins to infectious agents of disease; from the temporarily incapacitating to the highly lethal; and from weapons with only a short range of action to weapons that could attack whole populations.

It is within the capability of nearly every nation and even of some dissident or criminal groups to acquire powerful chemical and biological weapons. The principal barrier to proliferation is not cost or technical complexity. It is military convention and the prevailing norm that holds the hostile use of poison and disease to be abhorrent.

The fact that CBW weapons are considered to be unconventional and abhorrent is a valuable U.S. security asset that should be carefully preserved and strengthened. There are two principal reasons why this is so.

First, proliferation of CBW weapons would endow many states and even terrorist groups with the capability to threaten the U.S. and its allies with a level of violence much greater than that which is otherwise accessible to them.

Second, the use of CBW weapons in local and regional conflicts in which the U.S. and its allies are not initially involved could nevertheless provoke military escalation and extreme political instability, eventuating in the commitment of U.S. military forces and their exposure to CBW weapons.

Simply put, a rich nation like the U.S. should seek to maintain and strengthen the barriers against the proliferation of cheap weapons of mass destruction.

Twenty-five years ago, U.S. policy depended on possession of chemical and biological weapons as a deterrent to their use by others. At that time, the policy began to change as a result of extensive interagency study and review which concluded, among other things, that like-for-like deterrence does nothing to prevent proliferation and, if anything, encourages it.

The shift in U.S. policy became dramatically evident in 1969, when President Nixon announced unconditional U.S. renunciation of biological weapons, and in the following year when this unilateral U.S. renunciation was extended to include weapons employing toxins. The trend continued in 1975 when President Ford, having obtained the advice and consent of the Senate, ratified the 1925 Geneva Protocol prohibiting first use of chemical and biological weapons and the 1972 Biological Weapons Convention prohibiting development and possession of biological weapons. Although helping to solidify the international norm against chemical and biological weapons, neither of these earlier treaties has significant provisions for verification, sanctions, or continuous oversight.

Alerted to the continuing danger of CBW weapons by the Iran-Iraq War and the Gulf War and by subsequent discoveries in Iraq by inspectors of the UN Special Commission, the U.S. under President Bush led the multilateral negotiations in Geneva culminating in the Chemical Weapons Convention. Signed by the U.S. in January 1993, the Convention was subsequently submitted by President Clinton to the Senate.

Now, for the first time in the progression of steps to abolish the threat of CBW weapons, the Senate has before it a global treaty that prohibits development, possession and transfer of chemical weapons and includes measures for verification, penalties for non-compliance, and a standing political committee of states parties with a full-time professional technical secretariat to oversee compliance with the provisions of the treaty.

The verification provisions of the Convention, especially those for short-notice challenge inspection, are substantial and unprecedented. Considerable debate has centered on attempting to quantify their effectiveness. Some individuals with relevant experience are optimistic, others are not. Until the Convention has operated for a time, the debate is unlikely to narrow. At a minimum, the Convention's verification provisions will add significantly to the ability of U.S. intelligence agencies and the world community to detect and verify violations and to distinguish between violations and false alarms. This, together with the political and moral force of a global agreement to outlaw chemical weapons, will act to deter violations and false accusations and to break the cycle in which some nations might seek CBW weapons out of concern that others are doing so. Finally, the Convention will give the President an increased range of mechanisms and options for dealing with suspicions, allegations, and violations.

Weighed against these considerable benefits, the costs and limitations of the Convention provide no basis for withholding the advice and consent of the Senate to its ratification.

* * * * *

While strongly supporting prompt U.S. ratification of the Chemical Weapons Convention, there is an issue that gives me and many others serious concern. This is the risk of any explicit or implicit Senate endorsement of an erroneous treaty interpretation that creates a loophole for states to develop, test, produce, stockpile, and transfer chemical weapons in any quantity and of any type based on chemicals that

are temporarily disabling, either those chemicals presently used for riot control or more powerful "riot control agents" yet to emerge from the laboratory.

Some U.S. officials who have appeared before the Committee have suggested that the Convention's only restriction on "riot control agents", as that term is defined in the Convention, is that they should not be used as a method of warfare. If this claim were true, these disabling chemical weapons would be entirely exempt from the Convention's prohibitions on development, production, stockpiling and transfer. For example, states would be free to develop and accumulate stockpiles of bombs or artillery projectiles loaded with temporarily acting disabling agents, stockpiles whose only plausible use would be in war.

Indeed, large quantities of such munitions were used in WWI and were stockpiled by both sides in WWII. Riot control agents were extensively used in the Iraq-Iran War. And after the Gulf War, the U.N. Special Commission found that approximately half of Saddam Hussain's chemical arsenal consisted of large caliber mortar projectiles loaded with riot control agent CS. In war, riot control agents are used to drive personnel from protective cover into the line of ground fire or bombing, to disrupt their operations, and otherwise as multipliers of lethal force. History and common sense make it abundantly clear that riot control agents can be chemical weapons of war.

In fact, the claim that riot control agents are exempt from all parts of the Convention except its prohibition against actual use as a method of warfare is incorrect, unnecessary for preserving virtually all presently permitted U.S. uses of riot control agents, and dangerous to U.S. security.

Riot control agents are not exempt. The status of riot control agents is clearly spelled out in Article II of the Convention. They are defined as "Any chemical not listed in a schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure." Art. II(7).

This would include, for example, the widely used irritant CS and also, if present development programs succeed, powerful opioid chemicals intended to cause temporary paralysis and other chemicals intended to cause temporary disorientation.

Every riot control agent, as defined above, is also a "toxic chemical", defined in the Convention as "Any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals." Art. II(2).

The Convention's definition of "chemical weapons", to which its prohibitions of development, possession and transfer apply, is "Toxic chemicals and their precursors, except where intended for purposes not prohibited under this Convention, as long as the types and quantities are consistent with such purposes." Art. II(1).

It follows that the status of riot control agents, like any other toxic chemicals and munitions designed for their delivery depends on their intended purpose, so long as their types and quantities are consistent with such purpose.

The Convention's definition of chemical weapons, based on purpose rather than on the chemical identity of a substance, underlies the entire Convention. It enables the Convention to deal with dual-use chemicals and with chemicals that have not yet been discovered, protecting peaceful uses and accommodating the inevitable advance of science.

The specific inclusion of "riot control purposes" in the list of purposes permitted by the Convention underscores the fact that riot control agents are subject to the same definition of chemical weapons as any other toxic chemicals.

Virtually all presently permitted U.S. uses of riot control agents are permitted by the Convention. The Convention's list of purposes that are permitted specifically includes "Military purposes not connected with the use of chemical weapons and not dependent on the use of the toxic properties of chemicals as a method of warfare" and "Law enforcement and domestic riot control" Art II(9). Thus, the use of riot control agents for virtually all presently permitted U.S. uses is permitted under the Chemical Weapons Convention.

For a more specific analysis of permitted purposes, especially by the military, I ask permission of the Committee to include for the record, a paper entitled *Proposed Guidelines on the Status of Riot Control Agents and Other Toxic Chemicals under the Chemical Weapons Convention*. Its senior author, Professor Abram Chayes, served from 1961 to 1964 as the legal Advisor at the U.S. Department of State.

Exempting riot control agents would endanger U.S. security. To disregard the Convention's definition of chemical weapons and argue that temporarily disabling chemicals can never be chemical weapons is to forfeit the Convention's prohibitions against development, production, stockpiling and transfer of weapons based on present and powerful future disabling chemical. With respect to such weapons, the effect of the Convention would then be reduced to that of the 1925 Geneva Protocol,

which prohibited only actual use in war, but not development, possession and transfer and under which many states have stockpiled chemical weapons. Such an outcome poses the danger of a partial return to the mutual suspicion that drove chemical weapons acquisition before the Convention.

In its report to the full Senate, it is greatly to be hoped that the Committee, while noting the specific inclusion of "law enforcement and domestic riot control" among purposes permitted by the Convention, will give no support to any exemption of riot control agents from the Convention's prohibitions. The United States should not permit exceptions that might erode the norm against CBW that it seeks to establish through the Convention.

[The paper referred to may be found in committee files.]

The CHAIRMAN. Without objection.

STATEMENT OF THE HONORABLE MICHAEL MOODIE, PRESIDENT, CHEMICAL & BIOLOGICAL ARMS CONTROL INSTITUTE, ALEXANDRIA, VA

Mr. MOODIE. Thank you very much, Mr. Chairman.

I have a written statement that I would like to introduce for the record. And with your permission, use my 6 minutes to summarize that statement.

The CHAIRMAN. Thank you very much. That will be done without objection.

Mr. MOODIE. Thank you, Mr. Chairman. I appreciate the opportunity to appear before the committee with respect to the ratification of the Chemical Weapons Convention.

Let me be clear at the outset: despite its shortcomings, the Chemical Weapons Convention should be fully supported. I say that not as a participant who was deeply engaged in the closing phases of the negotiation, and whose bureau at the Arms Control and Disarmament Agency had the interagency lead in those negotiations, but on the merits of the Convention itself.

My view is that one can go beyond the argument that the world is better off with the treaty than without it, which is true, but nevertheless, smacks of damning with faint praise. Indeed, a more robust case in favor of the Convention can be made.

The case for the CWC begins with the appreciation that arms control is a tool of policy not an end in itself. No one should expect that any single arms control agreement can totally solve a particular set of problems. It is only one of many tools needed to meet a given set of objectives.

This sense that arms control must work in harmony with other policy tools is especially important in discussing CWC ratification because, in the process of that discussion, there is a temptation to focus single-mindedly on the arms control instrument itself.

Yielding to that temptation creates expectations of the agreement that it was never intended to meet and ignores the other policy measures that can and must be pursued.

Ratification and entry into force of the CWC will not remove our concern over chemical weapons proliferation, but having the treaty in place contributes to U.S. security interests in four ways.

First, the CWC establishes an international norm. With more than 150 signatories, the CWC represents a globally embraced political standard against which the behavior of states and the international community can be measured and held accountable.

Second, the CWC creates an important legal regime. Without the treaty, there are no legal prohibitions against such activities as de-