

2 Callantina Road,
Hawthorn, Victoria
Australia 3122.
18th March 1992.

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Dear Matthew,

Thank you for your letter of 28 February, regarding the status of disabling chemicals in the projected Chemical Weapons Convention. Before I offer my comments could I point out that I have retired from the Materials Research Laboratory, and that mail sent to me there will be subject to delay.

My first comment would be that the US Administration has a long history of trying to re-negotiate agreed text, usually to the detriment of a strong CWC. One must presume that the various Agencies of the Administration differ in their views as to the desirability of a CWC.

Executive Order 11850, whilst not altogether lucid in its phrasing, seems to embody a view of the use of riot control agents that is acceptable to most States. I might comment in parenthesis, that a report I heard some few years ago suggested that the use of CS in rescue operations was counter-productive. However I doubt if we will be able to convince regiments like the SAS of this!

Detailed comments follow:

2) I agree that a definition of what is a riot control agent could lead to disagreement. We are used to thinking of CS and possibly CR as such, but there is a spectrum of agents ranging in the intensity and duration of their effects from these two through Adamsite to Lewisite, which could be classified as harrassing agents. I believe that the existing wording which relates to permitted purposes is unambiguous and should not be changed.

4) to 6) These paragraphs talk about the benefits of exempting certain chemicals..... Could these comments be rephrased to read "the possible military benefits" ?

9) I believe that the interests of the US and other potential

States Parties are well protected by the existing wording. The suggested new wording could provide a loop-hole, which might be exploited not only by the US but also by other Parties. The idea that States may endeavour to keep their options open might appeal to Iraq as well as to the US!

C. Toxicity and lethality.

It is possible that the new wording suggested by the US may be designed to protect a new generation of "incapacitating chemicals". It is my understanding that the opioids to which you allude are of two types. Many are severe respiratory depressants, and are thus lethal agents of considerable potency. They have the disadvantage from the military point of view that they are solids, and are therefore difficult to disseminate.

Others are capable of producing states resembling catalepsy in some animals. They have been used to immobilise rhinos and other large animals so that they may be relocated. They are extremely species specific, and I know of no evidence that they are effective in man. They also have a rather narrow safety margin. There have been suggestions that some drug combinations might produce a catalepsy-like state in man, but I am unaware of the status of such work. Implications for rescue operations are obvious, but might be hard to achieve in the real world.

I would suggest that the dosage mentioned in the last paragraph on page 5 should be checked, both for the opioids and for VX. The paralytic toxicity mentioned should be clarified. Paralysis means respiratory paralysis as well as that of other voluntary muscles, and such agents would be lethal. Succinyl choline, which is a short acting neuromuscular blocker, has been used in dart guns to capture animals. It is likely however that man can tolerate apnoeic periods less well than such animals, and again the safety margin would be very narrow.

I conclude with the hope that the US Administration can be persuaded to live with the existing wording. It is unambiguous, and in line with the policy outlined in Administrative Order 11850. Disabling chemicals which may be developed in the future would not, I believe, be a "humane" way of conducting a war. Use in riot control or rescue operations after terrorist attack would not be prohibited by the CWC.

I hope that these comments may be of some use to you. I also hope that you and Julian and the other members of our Board are well, and hope to see you all before too long.

With all best wishes

Shirley Freeman