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THE WHITE HOUSE  
WASHINGTON

August 17, 1972

MEMORANDUM FOR

Dr. Henry A. Kissinger

I have reviewed the study prepared in response to NSSM 157 by the ad hoc group and wish first of all to emphasize three points:

1. in contrast to BW agents, lethal CW agents can be very effective weapons against an unprotected, unprepared, or unwarned force, even more effective than modern conventional ordnance;
2. relative to the Soviet Union and the other Warsaw Pact nations, US troops are very poorly prepared to engage in chemical warfare (the troops of our NATO allies are even less well prepared) and the prospects for improving their capability to do so are poor;
3. although we are well aware of the excellent Soviet CW defensive program, our detailed knowledge of their offensive program (what agents, where and how produced, where stored, etc.) is so limited and the diversity of available methods of production so great, that verification in the technical sense can by no means be relied upon to assure that limitations on stockpile or production are being observed. (Even very intrusive on-site inspection will not significantly increase the very low level assurance that seems possible without it.)

It follows from the first two of these generally accepted points that it is in our overall interest to strengthen political restraints against the introduction of chemical agents into war, and that agreements which tend to restrain national capabilities equally are likely to favor the US rather than the USSR. Even though such agreements may not be fully honored, the present disparity between the capabilities of the US and the Soviet Union are so great that we could tolerate a great deal of uncertainty in the honoring of properly chosen agreements without a

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2

net detriment to our national security. Hence, in some cases, we could readily accept the limitations on verifications indicated in item 3 preceding. However, since these weapons are effective weapons that can be produced without great difficulty, it seems unwise to rely on political constraints alone to inhibit their actual use. Thus, I would urge that the US retain a CW retaliatory capability.

Since options 3, 4 and 5 do not permit retention of an in-kind retaliatory capability, I would recommend rejecting these.

A treaty limiting stockpiles, Option 1, should meet the requirement for retention of an in-kind retaliatory capability and also permit us to modernize our stocks through the introduction of weapons that are absolutely safe in storage and transit. Furthermore, the working group pointed out that we have a great deal of flexibility in determining how stockpiles might be limited and to what level they might be limited since we are in the process of reducing our stockpiles anyhow. Thus there is much to commend this option.

Regarding Option 2, I am concerned that a ban on production would ultimately reduce our assurance of a capability to retaliate in kind, without effectively limiting the capability of others.

Our present capability to retaliate is inadequate because of a lack of appropriate weapon systems, difficulties in storage and handling, and deployment limitations imposed out of concern for safety by the Congress. The Navy, for example, will not handle available weapons on its ships. The Air Force is quite concerned about the transportation of these weapons by air. Movement of these weapons in foreign countries is highly restricted. Consequently, we have great difficulty in having these weapons available at the places where retaliation might be called for. Most of these problems are solved by the introduction of "binary" weapons now in development and which would be prohibited under a production ban.

There remains also some uncertainty as to the viability of our stockpile under a production ban because of the possible decomposition of the lethal agents themselves. Recent progress in the development of inhibitors appears to have gone a long way towards easing what was a

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3

difficult problem. However, most of our filled munitions contain an older inhibitor and we do not have enough experience with the new inhibitors to say with certainty that our stockpile could be maintained for a decade or two. This problem, of course, must present itself to other nations as well.

Furthermore, I find it impossible to define a production ban in a meaningful way. A production ban would certainly limit the production of finished lethal agents. However, in the so-called binary weapons which are now under development, two non-toxic compounds are mixed during the flight of an artillery shell, missile, or aircraft, and react to form the final highly toxic agent. A general production ban would presumably also limit synthesis of these agent precursors. However, production involves a series of chemical reactions starting with commonly available initial reactants. Many of the possible starting materials are produced in very large quantities for use in the production of insecticides, fuel additive, flameproofing compounds, etc. Since most of the possible reactions leading to the final precursors of the active agent are in themselves straightforward and can be carried out rapidly with simple equipment and minimal risk, it is not clear how far back restraints must be placed in the synthetic sequence in order to have some assurance that we have at least delayed the fielding of a lethal chemical agent capability by countries actually observing the ban. The number of G and V agents which might be produced is so large, and the methods of production so numerous that we would find it difficult if not impossible to specify all of the precursors which would have to be searched out in order to verify that a violation was in fact occurring. Since so many of the starting materials have other uses, it is not clear that a production ban, no matter how defined or verified, would in fact effectively limit the lethal chemical capability of another country.

Therefore, I favor Option 1 with no production ban, or possibly a stockpile limitation with a ban on the production of finished agents only. The latter would permit all nations to modernize their stockpiles through the introduction of binary weapons while retaining a fixed total agreed stockpile level.



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