MEMORANDUM FOR SECRETARY OF DEFENSE

SUBJECT: Chemical Warfare Policy

The attached package is in response to your request for a review of our current chemical warfare policy. The views of the JCS, SA, and ISA are summarized in the memorandum at Tab I. You will note therein that while JCS and ISA have reached general agreement on a possible CCD initiative early this fall, SA is opposed to such a move. Gardiner Tucker's views are explained in greater detail in a memo from him at Tab II.

Since Gardiner raises a number of issues not covered in the joint ISA, SA, JCS study itself, I should like to address myself briefly to them here.

In the basic study we set forth three alternatives: 1) offer no new chemical warfare arms control proposal now; 2) offer a limited proposal for a prohibition on the production of lethal agents; 3) offer a comprehensive chemical warfare disarmament proposal.

Systems Analysis recommends no new proposal, with continued study of three issues now before the CCD:

1. Identification of chemical agents.
2. Techniques of verification.
3. Administration of verification procedures.

SA also recommends that, within DOD, we undertake a further study of alternative chemical arms limitation proposals and a study of our current chemical posture, aimed at developing recommendations for improving our retaliatory capability.

I strongly disagree with this approach for the following reasons:

1) To delay further while we again study possible chemical arms limitation proposals would mean that we would lose any chance of tabling a proposal this year at the CCD.

CLASSIFIED BY ASD/ISA
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 13652
AUTOMATICALLY DOWNGRADED AT TWO YEAR INTERVALS
DECLASSIFIED ON DECEMBER 31, 1982
2) A study of our chemical posture and what we should do to correct it will only reveal what we already know: Our current posture is, at best, only barely consistent with our stated "retaliatory" policy (NSDM-35). But, no matter what recommendations the study might produce regarding the augmentation or refinement of our present CW arsenal, there would be no way to get money from Congress for any such additional apparent offensive capability.

3) I doubt Gardiner's claim that we can ride out this session of the CCD without some new proposal of our own. Just prior to the commencement of the session of the CCD talks now in progress, we received from ACDA (and from direct British Embassy sources) confirmation of the intention of the British CCD delegation to consider seriously a comprehensive and unverifiable chemical weapons control proposal which they would table unless the United States indicated it had a new initiative ready for this session. The Soviets, who have already tabled a rather simplistic general disarmament proposal, approached the U.S. delegation last week to say that they would be very receptive to any initiative on a partial chemical weapons limitation. The Swedes have told our negotiators in Geneva that they may shift from their willingness to support a partial limitation to a sweeping Soviet-type proposal, and, generally, the non-aligned have reaffirmed their support for the concept of a comprehensive prohibition. In short, the assessment of our negotiators is that we have about one month before the bottom falls out of our present position. We could probably ride out the storm, but at the cost—which I believe to be unnecessary—if the appearance of great recalcitrance and negativism on our part.

4) If DOD does not move now to initiate a limited proposal, other departments of the government are likely to react to present Soviet feelers by putting forward proposals far less acceptable than ours.

5) Finally, and perhaps most important, the initiative I have recommended (to prohibit the further production of lethal agents) would begin the reform of our chemical posture, which I believe to be essential; but it would not do so by a frontal attack, which, in my view, would be politically unworkable. Our capability today is extremely limited, and I see no sign that the Congress is--or will soon be--in a mood to correct those limitations. Thus, we should be prepared to make a virtue of necessity by proposing an initiative that would be a logical follow-on to your earlier imaginative BW success, gain us some domestic and international recognition, and head off sweeping and ill-conceived proposals from others, while at the same time suspending the production of a weapon of dubious tactical or strategic value. This is an opportunity we should not miss.

(Signed) G. Warren Nutter
MEMORANDUM FOR THE SECRETARY OF DEFENSE

SUBJECT: Chemical Warfare Policy

We are attaching the study on chemical warfare (Tab A) directed by your memorandum of 2 June. The study was prepared by representatives of the Assistant Secretary of Defense (International Security Affairs), Assistant Secretary of Defense (Systems Analysis), and the Joint Staff. It presents three basic alternatives: offer no arms control initiative, offer a limited initiative, or offer a proposal for complete elimination of offensive and defensive capabilities.

The ASD(SA) recommends the first alternative of offering no new arms control initiatives as our position at the CCD. Both alternatives two and three could result in unverifiable chemical arms limitations agreements which would impede rectification of shortcomings in the current U.S. chemical posture. Both would leave us unsure, however, of the extent of compliance of other countries, especially the U.S.S.R. He supports the current U.S. proposal in the CCD to study seriously the three major issues of (1) identification of chemical agents, (2) techniques of verification, and (3) administration of verification procedures, as he feels answers on these questions must be obtained before details of alternative approaches, such as proposed in alternatives two and three can be worked out. He points out that only this first alternative, through the work already proposed at the CCD, has been well thought out. He would also support study in the U.S. Government aimed at defining arms control proposals along the lines of alternatives two and three and along other lines suggested by the study (Tab A). He would, in the interim, move to rectify the most serious shortcomings of our current retaliatory posture, especially reduction of the vulnerability of our chemical capabilities to conventional and chemical attack.

The ASD(ISA) recommends the second alternative, a limited initiative to ban further production of lethal chemical weapons. He believes our current CCD program is not sufficiently attractive to prevent other far more restrictive proposals from being tabled, and perhaps adopted, at Geneva. Further, he believes alternative 2 is in keeping with the thrust of the Moscow Communique, and would gain general support from the agencies in Washington, thus forestalling the possibility that
more far-reaching proposals might be suggested to the President. Finally, ISA believes no issue of precedent is raised by proposing an agreement that does not require verification, since the recently concluded BW convention is not verifiable. Verification is an issue which must be decided on the merits of the particular case—a point we have often before made in international fora. We have provided for adequate verification in SALT; we must insist on it for MBFR. But, in ISA's view, insistence on verification of a ban on the production of lethal chemical weapons would not only be substantively unnecessary, but would largely negate the political effects of tabling an otherwise forthcoming proposal in Geneva. An imaginative proposal now could provide a reduction in the chemical warfare capability directed against us while reducing the likelihood of proliferation, all at no cost in terms of current or planned U.S. programs.

The Joint Chiefs of Staff, whose views are attached at Tab B, concur in the desirability of a proposal to ban production of lethal chemical weapons. They recommend, however, that the proposal include a verification provision, with the U.S. delegation at the CCD being directed to request further instructions from Washington before dropping that provision.

All recommend that our basic chemical warfare policy should be reflected in a "retaliation only" posture. A CCD initiative to limit stockpiles to levels consistent with this posture would therefore be appropriate under any circumstances.

Depending upon your decision as to which of the several possible initiatives you prefer, we will prepare appropriate letters from you to Secretary Rogers and ACDA Director Smith forwarding your proposal.

[Signatures]

Assistant Secretary of Defense (Systems Analysis)

Assistant Secretary of Defense (International Security Affairs)

Attachments:

a/s

Approve current CCD program

(Approve limited initiative without verification

(ISA recommends)

(Approve limited initiative with verification

(JCS recommends)

(Approve stockpile limitation initiative

(All recommend)
United States policy with respect to chemical warfare is to deter the use of chemical weapons by other nations and to provide a retaliatory capability for deterrence. NSDM 35 is very explicit in saying that, whereas we renounce biological warfare in all circumstances, we will maintain a capability to retaliate in kind against a chemical attack. An important aspect of United States policy is our position that use of riot control agents (RCA's--i.e., tear gases) and herbicides does not involve waging chemical warfare.

The Threat of Chemical Warfare

We have no reliable estimate of the size of the Soviet chemical stockpile, but we know they are capable of producing lethal chemical agents quite similar to our C and V-agents. Evidence is lacking of any significant forward area storage of chemical weapons. Nevertheless, the Soviets are believed to possess a complete array of chemical delivery systems, including tube artillery, rockets, tactical missiles, and aerial bombs. Soviet and Warsaw Pact forces possess large quantities of a wide range of protective equipment, much of which is of recent design. Extensive training in the use of this protective gear is integrated into regular military training and maneuvers.

Military Effectiveness of Chemical Weapons

The history of chemical warfare in World War I suggests that these kinds of weapons can, under certain circumstances, be effective. Between World Wars I and II developmental work on chemical weapons continued and Germany produced the nerve agents which are the primary chemical weapons today. Chemical weapons were not used in World War II although they were available.

In conflict between forces equally well prepared offensively and defensively for chemical war, chemical weapons may offer no advantage to either side. On the other hand, it seems undeniable that if a nation were significantly inferior in either offensive or defensive chemical capability, it might find itself at a disadvantage as to an important means of waging war, albeit one of limited scope.

United States Antipersonnel Chemical Agents

Almost any chemical agent taken in sufficient concentration can be lethal, but it is nevertheless true that some agents are designed to kill, while others are designed only to incapacitate their victims.
actual chemical stockpiles include only these agents, all lethal: nerve agent VX, nerve agent GB, and mustard.

Nerve Agent VX. This agent causes casualties primarily by absorption of the liquid agent through the skin, but it can also cause casualties quickly when it is inhaled as a vapor or an aerosol.

Nerve Agent GB. This agent is employed to cause casualties by inhalation of vapor. Like VX, it produces tension, tremors, confusion, weakness, convulsions and, finally, death.

Mustard (HD and HT). These agents will burn and blister any part of the body they touch, external or internal. They are generally useful only in tropical climates, or highly restricted to seasonal use in non-tropical climates.

Logistical Support for Chemical Operations

The projected consumption rate for chemical munitions will vary according to the scenario, but the Joint Chiefs of Staff use a planning figure of Because of the weight of containers, pallets, and explosives for dispersal, the shipment tonnage required

Protective Equipment. Over-all, the defensive posture of U.S. forces with regard to chemical warfare is marginal. There is a serious shortage of protective clothing, detection and warning devices, decontamination gear and collective protection shelters.

Chemical Munitions Development/Procurement

The FY 70 and 71 Military Procurement Acts specifically prohibited procurement of delivery systems for lethal chemicals unless the President certified to Congress that such procurement was essential to the security of the United States.

Even without legislative constraints, it is unlikely that any lethal chemical agents would be produced for several years because problems associated with maintaining stocks of these agents have led to work on binary munitions, which will not be available until at least 1975.
Alternative Negotiating Positions

There are a great many uncertainties about chemical warfare, but it is very clear that our current military posture in this regard is not consistent with our declared national policy. We would not be prepared to retaliate in kind if Soviet forces were to launch an offensive in Europe using chemical weapons. This state of affairs was recognized by the Under Secretaries Committee at the time they concluded their first annual review of chemical warfare and biological research programs. In that review, it was determined that a study was required "to determine what constitutes an adequate and effective retaliatory capability and deterrent against CW attack." In conducting the study the working group attempted to take a broader look at the problem, and the effort was directed toward prevention as well as deterrence. Consequently a broader range of options were developed than originally anticipated.

Coupling the options developed in the deterrent study with analysis done since then, there are basically three paths which can be followed with respect to negotiating initiatives at the CCD: (1) make no immediate offers to limit chemical weapons (2) offer a limited initiative or (3) propose total disarmament initiative covering both offensive and defensive chemical warfare capabilities.

Alternative 1: The first alternative (make no immediate offers to limit chemical weapons) is essentially a continuation of our current posture at the CCD. This involves an invitation to explore the complex issues involved seriously. On March 21, 1972, we tabled a U.S. working paper concerned with three problems: identification of chemical agents, techniques of verification, and the administration of verification procedures. The paper has been favorably received; however, the CCD has not yet come to grips with the issues raised by this paper. Even so, it has not been received as an effort to delay progress in placing limitations on CW. (This is in contrast to the rather simplistic Soviet draft treaty which ignores most of the serious problems associated with the complex and difficult question of verifying a possible CW treaty.)

Alternative 2. The second alternative, which is to offer a limited arms control initiative, is based on converting current constraints on U.S. chemical programs into negotiating initiatives. For a variety of reasons, including Congressional prohibition against expenditure of funds for lethal chemical weapons, we have no plans now to produce additional nerve agents. Therefore, we can propose a ban on production of lethal agents without effect on U.S. programs, while preserving some elements of a deterrent capability.

Further, we plan certain reductions and restructuring in our current stockpile as weapons become obsolete. We might also propose a reduction in capability to a "retaliation only" level. Although it would be preferable to obtain agreement to on-site inspection of compliance, an
agreement without such a clause would limit potential opponents to varying degrees while it would not affect any current or prospective U.S. plans or programs.

Alternative 3. The third negotiating alternative, to offer a comprehensive ban on all offensive and defensive chemical warfare capability, seeks to make chemical warfare impossible by eliminating chemical weapons from arsenals. To be comprehensive, and to permit verification by national means alone, such a ban would have to include defensive capabilities, since training with full protective gear would be a prerequisite to effective use of chemical weapons and would be relatively easy to detect. In such a case, it would be necessary also to include incapacitants and RCA's, since differentiation between training in use of these agents and lethal agents would not be possible.

Choice of a negotiating alternative at the CCD should be coupled with steps to rectify deficiencies in current U.S. CW posture. We have very limited defensive capability; our troops and stockpiles are relatively vulnerable; and we do not have a viable retaliatory capability. Options for such rectification would include the following (which were identified in the deterrent study).

Option A. Develop a chemical warfare capability sufficient to deter a chemical attack.

Sub-Option i. Chemical warfare capability for continued offensive and defensive operations.

Sub-Option ii. Retaliation only, i.e., set aside warfare considerations and develop a capability for purely retaliatory use of chemicals.

Option B. Continue the NATO policy of relying principally upon our conventional and nuclear force for deterrence.

Sub-Option i. Retain present limited chemical offensive capability; continue improving defenses against chemical weapons.

Sub-Option ii. Destruction of existing chemical munitions, thus accentuating reliance on conventional and nuclear weapons. This option is available under all negotiating alternatives.

Comment on the Negotiating Alternatives

Alternative 1 is an offer to join others in studying key problems associated with chemical warfare arms control. Relative to the other alternatives, it has the following advantages and disadvantages:
Advantage 1. It retains U.S. flexibility to retain or procure any offensive and defensive chemical warfare items required to give U.S. forces the desired warfighting capability.

Advantage 2. It precludes dependence on unverified arms limitation agreements.

Advantage 3. It does not require the U.S. to alter any actions, and leaves the U.S. free to change its chemical posture should it decide to do so.

Disadvantage 1. Unless coupled with steps to improve our chemical warfare posture, this alternative leaves U.S. and allied forces relatively vulnerable to chemical attack and relatively unprepared to counterattack with chemical weapons.

Disadvantage 2. Because this alternative does not include an arms control proposal now, it may well be viewed as inconsistent with the U.S. commitment, made at the Moscow summit, to continue efforts to reach an agreement on chemical weapons.

Alternative 2 is a limited proposal that all production of lethal nerve agents be banned. It might also include a stockpile limitation to the "retaliation only" level. This is a middle course under which we could attempt to begin the process of arms control for chemical weapons while preserving a considerable amount of U.S. flexibility. The advantages and disadvantages of this alternative are:

Advantage 1. It is consistent with our commitment at the Moscow summit.

Advantage 2. It may pre-empt more restrictive proposals.

Advantage 3. By being limited, and being defensible in terms of its intended limitations, it may avoid debates over whether riot control agents and herbicides are or are not included in chemical warfare.

Advantage 4. It does not require the U.S. to alter any actions. Since we have no plans to produce lethal chemicals, and since the sense of Congress seems likely to continue to be opposed to such production, we are giving up nothing. With respect to stockpiles, any agreement would clearly be compatible with current U.S. stockpile adjustment plans.

Advantage 5. By limiting, or at least increasing the likelihood of limiting lethal agent production in other countries, this alternative would serve to avoid a widening gap in U.S.S.R./Warsaw Pact and U.S./NATO chemical warfare capabilities.

Advantage 6. Because most small countries would find it difficult to refuse to become parties to this agreement, there would be an inhibition on the proliferation of chemical weapons, notwithstanding their
attractiveness to such countries as an inexpensive means of inflicting mass casualties. However, it may be that those countries we would most want to see become parties to the agreement are least likely to join.

Disadvantage 1. Unless coupled with steps to improve our chemical warfare posture, this alternative leaves U.S. and allied forces relatively vulnerable to chemical attack and relatively unprepared to counterattack with chemical weapons.

Disadvantage 2. The agreement would not be subject to unilateral verification of complete compliance.

Disadvantage 3. Some believe that there would be a precedent in proposing a chemical warfare arms control agreement without verification, which would weaken our position in other settings such as MFNR and CALT follow-on. Others point out that the recently concluded BW convention has no provision for verification, that each arms control agreement must be viewed on its own merits in this regard, and that we would in any case retain a retaliatory capability under the agreement being proposed.

Alternative 3 is a total chemical warfare disarmament proposal, which, to be effective, must be accepted by all parties to potential conflict. It would prohibit possession of either an offensive/defensive chemical warfare capability. Its advantages and disadvantages are:

Advantages:

1. Adherence to this alternative virtually eliminates the possibility of chemical warfare.

2. National means alone are relatively likely to detect violations of this alternative. This is so because of the difficulty of concealing the defensive training which is a prerequisite for effective offensive use of chemical weapons.

3. If signed by the U.S. and the U.S.S.R., this alternative would eliminate an advantage currently possessed by the U.S.S.R.

Disadvantages:

1. Abstention (or contravention) by any competent country could jeopardize the security of all adherents.

2. Compliance with the provisions of this alternative would require the U.S. to forsake the use of riot control agents by military forces, either in warfare or civil emergency. Riot control agents cannot be exploited without use of a gas mask and gas masks would be prohibited.

3. A number of significant countries are most unlikely to sign (e.g., IND, France, Israel, Egypt).
Conclusions

Alternative 1 (press for serious consideration of the U.S. working paper tabled in March) will not lead to immediate agreements, but it is constructive and it does avoid reliance on unverifiable stipulations. Alternative 2 (offer a limited arms control proposal) builds on domestic political constraints against production and practical trends toward reduction in stockpile. It may appear to be very forthcoming in terms of achieving some sort of agreement. It is responsive to the President's summit commitment. It would offer some reduction in the stockpile available for use against us and discourage proliferation, all at no cost in terms of current or planned U.S. programs. It does require the U.S. to offer an essentially unverifiable proposition. Alternative 3 would require the U.S. to give up the military use of riot control agents and herbicides and it might still entail some verification risks.
MEMORANDUM FOR THE SECRETARY OF DEFENSE

Subject: Chemical Warfare Policy (U)

1. (TS) Reference is made to your memorandum, dated 2 June 1972, subject as above, which requested a study of US current chemical warfare (CW) posture vis-a-vis the USSR and possibilities for a negotiating initiative for the next session of the Conference of the Committee on Disarmament.

2. (TS/NF) The study in Appendix A hereto of the CW initiatives which might be appropriate for the Conference of the Committee on Disarmament was prepared by the Joint Staff and the staffs of the Assistant Secretaries of Defense (International Security Affairs) and (Systems Analysis). This study concludes that US military posture would not be adversely affected should the United States:

   a. Propose a ban on production of lethal agents without effect on US programs, while preserving some elements of a deterrent capability.

   b. Propose a reduction in capability to a "retaliation only" stockpile level.

   c. Accept an agreement to subparagraph a and/or b above, without obtaining agreement to onsite inspection of compliance even though such an onsite agreement would be preferable.

3. (TS/NF) In assessing the possible alternative negotiating positions, certain factors should be expanded upon:

   a. US CW Capabilities and Limitations. The US CW stockpile is relatively small and poorly distributed and provides a very limited capability to support effective chemical
The SSR is not retraliatory options.

Further deployment of present stocks is prohibited by Congress. Current plans of the Department of the Army will provide for the modernization of the US stockpile through the acquisition of approximately would not adversely affect the US posture. USSR acceptance of these levels, however, would probably require significant reductions in its stockpile and thus could be to US advantage.

B. USSR CW Capabilities and Limitations. A summary of the latest CW intelligence on the USSR provided by the Defense Intelligence Agency is contained in Appendix B hereto. Particularly germane to the issues at hand are the following:

1. The USSR stockpile is believed to be large, its doctrine and training accept CW as an integral part of its overall weapon systems, and it has chemical troop units organic to tactical regiments and larger units.

2. Firm intelligence supports the assessment that the USSR could initiate and sustain large-scale CW.

3. The current agreed US intelligence position is that chemical agents constitute at least one-third of the USSR tactical rocket and missile warheads.

4. The USSR is reported to have used live high explosive rounds and CW and biological warfare (BW) agents in maneuvers. (One such maneuver was held in May 1971, during serious negotiations on BW disarmament at the Conference of the Committee on Disarmament.)

c. Verification Problems

1. Strict adherence by all parties to a treaty banning CW would be to the US advantage, whereas a treaty honored by the United States but not by the USSR could give the USSR an overwhelming advantage. In the case of a CW treaty similar to the existing BW treaty, which would ban all CW activity and result in stockpile destruction, adequate verification would be absolutely essential. It
appears that any effective form of CW verification must entail onsite inspection; considering the past USSR positions on the subject of onsite inspection, it is highly doubtful that it would agree, but the United States should seek it nonetheless.

(2) It should be borne in mind that, as the USSR, under the Limited Test Ban Treaty, is apparently willing to take greater risks than the United States of venting debris to the atmosphere which might be detected beyond its borders, it may be willing to take similar risks with regard to the production, testing, or training with CW. Of the 124 underground nuclear tests conducted by the USSR since the Limited Test Ban Treaty went into effect, possibly 57 vented into the atmosphere beyond the borders of the USSR. Current intelligence indicates 14 "certain" instances, 10 more in which there is "high confidence" of a violation, and 33 other "possible" violations.

4. (TS) It appears that:

a. The US CW posture vis-a-vis the USSR is poor, and there would be some advantage to be gained by a mutual chemical stockpile limitation.

b. The recommended initiatives must be carefully negotiated to insure that any ban on production of lethal agents does not prohibit the production of nonlethal binary intermediates which are planned to modernize the US retaliation stockpile.

c. Any level decided upon for the "retaliation only" stockpile capability should be consistent with the US current stockpile level until the United States has some real assurance of USSR compliance with treaty provisions.

5. (TS) Based on the above considerations, the Joint Chiefs of Staff concur that the relative military posture of the United States vis-a-vis the USSR would not be adversely affected should the United States proceed as indicated in the conclusions in paragraph 2 above. They would add that US initiatives should be restricted to lethal chemical agents only. (Note: Inclusion of incapacitants could soon involve tear gas/riot control agents and thus hopelessly confuse the issues. Riot control agents should continue to be considered as apart from CW in accordance with US national policy.)
6. (TS) Therefore, the Joint Chiefs of Staff would interpose no objection if the United States were to:

a. Develop a detailed proposal for a CW arms control measure consistent with the conclusions of subparagraphs 2a and 2b above, including provisions for onsite verification, for review and clearance within the US Government prior to the conclusion of the July 1972 discussions of the technical experts in the Conference of the Committee on Disarmament.

b. Develop the requirements for varying degrees of verification for the proposals in subparagraph 6a above. As a matter of principle, the Joint Chiefs of Staff believe that verification is an essential ingredient of any arms limitation agreement. However, in this case, because of the large disparity in military posture, it seems prudent to develop plans for review and clearance within the US Government.

c. Pursue the present US negotiating position on CW at the next session of the Conference of the Committee on Disarmament until such time as in the discretion of the US delegation it would be appropriate to introduce the US initiative developed in accordance with subparagraph 6a above. If, after pursuing this initiative, it is apparent that an agreement can only be concluded by modifying the requirement for onsite verification, the delegation should request further instructions.

For the Joint Chiefs of Staff:

T. H. MOORE
t: Chairman
Joint Chiefs of Staff

Attachments
[Omitted here are Appendices A and B to JCSM-276-72.]
MEMORANDUM FOR SECRETARY OF DEFENSE

SUBJECT: Our Chemical Warfare Posture (U)

The accompanying document offers you a range of chemical arms limitation proposals for use at the CCD. I believe that commitment now to either the second or third alternative in this paper would be a mistake, because neither of these proposals has been defined in sufficient detail for us to understand the military, technical and political ramifications; we are in no position to make an informed decision to offer either of them at the CCD at this time.

The U.S. has rejected "first use" of chemical weapons. This rejection has been incorporated into publicly stated U.S. policy to the effect that our goal is to deter the use of chemical weapons and to provide a retaliatory capability if deterrence fails. NSDM-35 further expands on this policy by stating that the U.S. will maintain a capability to retaliate in kind against a chemical attack.

The paper enclosed offers three alternatives for chemical weapons limitations.

Only the first alternative is sufficiently well thought out to permit commitment to it at this time. This alternative is a continuation of a course of action already undertaken by the U.S. at the CCD. In particular, we have tabled a working paper which undertakes to develop a fuller understanding of the exceedingly complex problems of definition and verification presented by chemical weapons. This paper has been received favorably and as a positive contribution to the solution of chemical arms limitation problems. Work in the next session of the CCD will be centered around the issues presented in the paper.

The second approach would commit us now to table a proposal at the CCD for a production ban on lethal chemicals. This proposal, however, is not defined beyond this general concept. It does not define lethal chemicals; it does not come to grips with the non-lethal ingredients of modern binary chemical agents; it does not deal with problems of transfer of chemicals across international boundaries; and it does not include any plan for verification. A careful examination of this alternative will
undoubtedly reveal that this is only a partial list of problems. One final criticism which can be made of this alternative is that it would complicate and impede, if not prohibit, correction of shortcomings in our current chemical retaliatory posture which in the judgment of all concerned does not meet the intent of NSDM-35. In particular, we would probably want to produce modern binary chemical agents in the creation of a secure chemical retaliatory capability; Alternative 2 would prohibit the production of these agents.

Alternative 3, a proposal for complete chemical disarmament, is equally undefined. Such disarmament is probably more verifiable than the production ban of Alternative 2. However, Alternative 3 also presents verification problems. The technical problems cited above would also exist in Alternative 3 and they would be accentuated by the possibility that a signatory, having completely disarmed, could be seriously disadvantaged by sudden abrogation of the agreement by a hostile neighbor.

Finally, I would like to observe that the most verifiable component of an agreement to disarm completely is the ban on chemical defenses against persistent percutaneous (long lasting, skin penetrating) chemical agents. This circumstance may contain the seed of progress in chemical arms control. If we could get agreement to ban chemical defenses for troops, such a ban, if verifiable, would make impractical first use of chemicals by anyone. Such a ban on chemical defenses, if carefully formulated, need not interfere with continued production and use of riot control agents, since only gas masks are required for such use, while full protective over-garments and associated decontamination equipment is required for a force to engage in hostilities with lethal, percutaneous chemical agents.

In conclusion, I recommend that you take the following actions:

1. Accept Alternative 1, continuance of the current U.S. position in the CCD on chemical warfare at this time.

2. Initiate a study in the Department of Defense of a range of chemical arms limitation proposals, including at least Alternatives 2 and 3, and one proposal built around the notion of banning chemical defenses against lethal persistent percutaneous agents.

3. Initiate study of ways to improve our chemical posture to satisfy the policies of NSDM-35.

4. Ask Warren Nutter and me to return to you by September 1st of this year with an analysis of alternative proposals for chemical arms limitations and for the U.S. chemical posture for your review and decision.

John D. Christie
Assistant Secretary of Defense