

FROM THE OFFICE OF:
Congressman Richard D. McCarthy
238 Cannon House Office Building
Washington, D.C. 225-5265

FOR RELEASE:

6:00 P.M.
April 21, 1969

STATEMENT
OF
CONGRESSMAN RICHARD D. McCARTHY
ON
CHEMICAL AND BIOLOGICAL WARFARE
POLICIES AND PRACTICES

APRIL 21, 1969

DOO & ACDA
on "National
Policy" -
attachment

Early in February of this year the activities of the United States in chemical and biological warfare were brought to my attention by a disturbing documentary shown on NBC television. I recognized that I knew almost nothing about this aspect of our military capability and decided to inform myself. My main interest was in the public policy questions relating to chemical and biological warfare; why do we need a capability?; what sort of capability do we have?; what are our policies governing the use of these weapons?; what do these activities cost us each year?; what are the safety precautions taken to protect the public against accident?; and are our academic and private institutions being improperly involved in chemical and biological research?

In order to inform myself about our CBW program I asked the U.S. Army to brief those Members of Congress who were interested in this field. On March 4, 1969, the Army presented a briefing, most of which they insisted on classifying. I did not find that briefing satisfactory; it did not answer the public policy questions. So I then prepared a comprehensive set of policy questions which I sent to Secretary of Defense Laird, Secretary of State Rogers, Director of the Arms Control and Disarmament Agency Smith, Ambassador to the United Nations Yost, and Dr. Henry Kissinger of the White House staff. While waiting for replies I have made a rather extensive study of the information that is available in public; I have received assistance from several organizations that are involved in a study of chemical and biological warfare, and I have consulted a number of individuals who are very knowledgeable in the field.

I have now received replies from all of the departments and agencies that I contacted with the exception of Dr. Kissinger. His office said that they had hoped to prepare a reply to my March 20, 1969 letter by last Friday but had not had time to do so, which is perhaps as much a comment on the priority placed on CBW policy in relation to other matters as it is on the pressures of the Executive Office. I would like to comment at this time on the nature of the information that I have received.

Chemical and biological warfare activities are shrouded in secrecy, unnecessarily so in my view. The Army's unclassified briefing was perfunctory at best; the classified presentation was not much better. I get the impression that the security curtain is parted only when it serves the interests of the advocates of the program. I found the replies from the departments heartening in some respects, but more deeply disturbing in most others. By far the most revealing information appears in sources available to the public such as occasional statements by public officials, open publications, and press reports, both domestic and foreign.

Perhaps the most immediately disturbing aspect of the replies that I have received from the departments is the contradiction between some of the replies and the information that is available to the public. These contradictions should be resolved; both the Congress and the American public deserve a full explanation if the credibility of our public officials is to be maintained. Some of these contradictions are:

1. Defense states that we maintain a limited offensive capability in chemical weapons; that the carefully controlled inventories are adequate for tactical response.

Yet we have in storage about 100 million lethal doses of nerve gas at Rocky Mountain Arsenal and Tooele Army Depot. Col. S. J. Efnor stated that the gas from a single bomb the size of a quart fruit jar could kill every living thing in a cubic mile. The inventory of nerve gas seems to be more than that required for an adequate tactical response.

2. General Hebbeler in the unclassified briefing stated that biological warfare is generally considered to have strategic implications rather than tactical.

Yet Defense says "although the employment of biological weapons against U.S. population centers cannot be ruled out entirely...". There appears to be a contradiction between the Army's estimate of the threat and that of Defense.

3. Defense states that the U.S. Armed Forces have the equipment to protect themselves against CB attack with the exception of a biological warning and detection device.

Yet I am informed that the Navy only purchases 1/10 of the quantity of atropine, the nerve gas antidote, needed for their total number of personnel.

4. State and Defense say that review has shown that there is no evidence of substantial permanent or irreparable damage, no significant permanent damage, to the ecology of Vietnam due to defoliation. Both Departments cite the work of Dr. Fred H. Tschirley as an authority; Defense cites a report prepared by Midwest Research Institute.

Yet Dr. Tschirley's report itself says that the mangrove tree, a source of food in Vietnam, is particularly susceptible to damage from herbicides and that he had seen quite a few dead mangroves, a tree taking about 20 years to grow. He goes on to say that a single treatment with the defoliants Orange or White would not be expected to have a lasting effect but that a second application during the period of recovery would have a wholly different effect. Press reports state we spray more than once in the same growing system.

Even more damaging, Dr. Tschirley, their authority, reviewed the Midwest Research Institute Report for Ecology, a professional magazine, and said, "Reading the MRI Report before visiting Vietnam left me with the feeling of having read a literature review that resulted in accurate general conclusions, but told me nothing about the ecological consequences of using herbicides in Vietnam." In summary, the MRI Report is a literature review of a subject for which there is a great deal of literature relating to temperate zones, but little relating to tropical vegetation." "The MRI Report is disappointing because its direct applicability to Vietnam is so tenuous."

Similarly, Professors Egbert W. Pfeiffer and Gordon H. Orians, professor of zoology at the University of Montana and professor of zoology at the University of Washington respectively, made the following report on April 3, 1969 after a two week visit to Vietnam.

7. Contd.

toxic material led the Army to buy up the land along the stream. Presumably the toxic material is diluted when it feeds into the river.

I do not find this safety record very reassuring.

8. Defense states that gases are transported according to rules established by the Interstate Commerce Commission and the U.S. Public Health Service - that an underlying layer of sand is used to reduce vibration and absorb any leakage - that all shipments are accompanied by a trained escort - that routes are planned to avoid populated areas and to minimize time in populated areas - and that transported agents are not volatile.

Yet in the incident reported in the Denver rail yards, these statements appear to be contradicted. I rechecked the facts with Dick Kruse, the reporter for KBT-TV/KBTR in Denver and found that the gondola cars carrying large tanks of nerve gas that he filmed in the Denver rail yards on a siding had no sand under them; they were on a siding in the center of Denver for most of the night; that he had spend about 1 1/2 hours filming the tanks both from the ground and up on the gondola cars and had seen no guards. General Hebbeler also stated that GB, presumed to be the agent in the tanks, is relatively volatile.

The movement of these agents by rail is fraught with danger; the Transportation Safety Board of the Department of Transportation has reported on the alarming increase in derailment and other forms of railroad accidents, up 85% between 1961 and 1967. As the Dunreith accident illustrated, the accident need not occur to the train carrying the gas; it might be caused by a passing train. If the accident were similar to that which occurred in Laurel, Mississippi, the explosion of the adjoining train might scatter nerve gas over a ten-block area of a city. Furthermore, the Transportation Safety Board will shortly announce some major revisions in transportation safety regulations because of their inadequacies, I am led to understand.

I also do not find Defense's reply that the statistical probability of a gas transportation accident is very difficult to determine because we have never had one. Certainly the art of safety and reliability analysis, as practiced by NASA and the AEC for example, has proceeded far enough to give some fairly good indications of the dangers involved.

I have also come across information available to the public on the transportation of biological agents that causes me grave concern. In a December 1967 publication issued by Fort Detrick, procedures for the careful packaging of biological agents were described, including a crash of an aircraft with biological agent containers aboard. The packages are designed to protect the biological agents that are being shipped; the report concludes that "Any number of such packages is now acceptable in one aircraft for shipment by commercial airlines under the Official Air Transport Restricted Articles Tariff No.6-D. Technical escort is not required. However, current regulations of the Armed Services require technical escort for any shipment in which the total volume of etiologic agent in all packages in one conveyance exceeds 3 gallons."

The text of the answer from the Department of Defense follows:

Honorable Richard D. McCarthy
U.S. House Of Representatives
Washington, D.C. 20515

April 15, 1969

Dear Mr. McCarthy:

The Secretary of Defense has asked me to reply to your letter of March 7, 1969, concerning chemical and biological warfare.

Answers to each of your questions are attached. Copies of reports and other materials which are relevant to the questions are included. It is believed this information responds to your inquiries on an unclassified basis. There are areas which could be extended and amplified by classified discussion.

Sincerely,

John S. Foster, Jr.
Director of Defense
Research and Engineering

Question 1. Is it our national policy to respond in kind to a gas attack against the nation? Do we state that we will use lethal gas against a nation that launches a gas attack against us, rather than a nuclear attack? Wouldn't it be cheaper and just as effective to retaliate with another weapon with which we have had operational experience?

Answer: It is the policy of the U.S. to develop and maintain a defensive chemical-biological (CB) capability so that our military forces could operate for some period of time in a toxic environment if necessary; to develop and maintain a limited offensive capability in order to deter all use of CB weapons by the threat of retaliation in kind; and to continue a program of research and development in this area to minimize the possibility of technological surprise. This policy on CB weapons is part of a broader strategy designed to provide the U.S. with several options for response against various forms of attack. Should their employment ever be necessary, the President would have to authorize their use. The U.S. does not have a policy that requires a single and invariable response. Deterrence is our primary objective.

Chemical weapons, in many tactical situations, are more effective than conventional (high explosive and projectile) weapons. Accordingly, it is believed wise to deter their use. If two approximately equally effective military forces were engaged in combat, and one side initiated a CB operation, it could gain a significant advantage even if the opposing side has protective equipment. Neutralization of this advantage could not be achieved with conventional arms.

Question 2. Is it our national policy to respond in kind to a massive biological weapon attack? Wouldn't it be cheaper and infinitely safer for all of mankind to respond to a biological weapon attack with other weapons with which we have had operational experience?

Answer: The U.S. policy and its rationale with regard to biological warfare is generally the same as that for chemical. As a matter of policy the U.S. will not be the first to use biological weapons, but we are aware of the capabilities these weapons place in the hands of potential adversaries. For this reason it is important to carry on our R&D program in BW, not only to provide necessary equipment, such as detection and warning devices, but to define and quantify more fully the potential threat to the U.S. from these weapons, and the hazards involved if they are ever used against us.

Question 3. If our gas biological warfare efforts are purely defensive in nature, what steps have been taken to defend our public from these threats? Why hasn't the public been instructed as to what to do in the case of a nerve gas attack, a hallucinatory gas attack, or an incapacitating gas attack? Do we stockpile antidotes, serums, and vaccines for gas and biological attacks at medical centers and instruct people where they are? We do, after all, instruct people what to do in the case of nuclear attack. We stockpile supplies in fall-out shelters that are marked so that the public will know where they are. Why don't we do the same for the threat from gas and biological weapons?

Answer: The threat to the U.S. civil population from CB attack has been studied by the Department of Defense, and these analyses are periodically up-dated. It is clear that the threat of CB attack is less significant than that of nuclear attack. For this reason, more emphasis has been placed in civil defense on the nuclear threat.

For logistic reasons chemical agents do not appear to pose a major strategic threat against the U.S. For example, it would require many tons of nerve agent munitions to carry out an effective attack against a city of a few million people. This may appear inconsistent with the high toxicity of the nerve agents, but for many technical reasons such as the difficulty in disseminating the agents in vapor or aerosol form, the dilution of the agent in the atmosphere, and their impingement on ground and vegetation, it is correct. For this reason, the U.S. does not maintain stockpiles of therapeutic materials for nerve agents. Although the possibility of the employment of biological weapons against U.S. population centers cannot be ruled out entirely, it does not presently warrant the priority given to defense against the effects of nuclear weapons. Research on methods of detecting and warning, identifying, and defending against biological attack are continuing, as is the review of the magnitude and nature of the threat.

The Office of Civil Defense has developed an inexpensive but effective protective mask for civilian use, and a limited production run was made to test production quality. No large scale production was undertaken because of the low estimate of the threat as described above. Should the threat to the U.S. population increase, this mask could be produced quite rapidly and, together with other necessary defensive measures, would afford protection against both chemical and biological attack. Filtration systems have been designed and tested, and these could be added to fall-out shelters to afford collective protection for groups of people. In addition, many of the emergency plans developed by the Department of HEW for post-nuclear attack medical support would be applicable. The emergency packaged hospitals, for example, provide for expansion of hospital facilities by the equivalent of 2500 hospitals of 200 bed size.

The U.S. does not maintain large stockpiles of medical supplies such as antibiotics and vaccines against the possibility of biological attack. There is no specific antibiotic therapy available for most BW agents. As for vaccines, there are more than 100 possible BW agents, and production and administration of 100 vaccines to the U.S. population is not practical. There is medical reason to believe that such a program would be generally injurious to health in addition to requiring prohibitive expenditures.

Question 4. We have been told by former Under Secretary of Defense Cyrus Vance, that the "why" of chemical and biological warfare is defense. Are our soldiers in the field, Vietnam, Korea, Germany, and sailors at sea able to defend themselves against all forms of chemical and biological weapons attack? Since we are using marginal forms of a chemical warfare in Vietnam, are our forces prepared for an escalation in the use of chemical weapons? Are our troops prepared for the possibility of the enemy responding with a stronger weapon than the incapacitating gases we use?

Answer: The U.S. Armed Forces have the equipment to protect themselves against CB attack with the exception of a biological warning and detection device which is under development. U.S. soldiers and sailors generally have masks and protective clothing; and collective protection equipment for vans and communication centers is being developed and supplied. U.S. troops in Vietnam are prepared for possible enemy uses of chemical weapons.

Question 5. Why do we choose to call defoliants herbicides of the type we use in our own agriculture rather than chemical warfare? What defoliants or chemicals, if any, are being used in Vietnam to destroy plant life which are not customarily used in the United States? To what extent are they used? What is the distinction between a chemical that is used to destroy crops and a plant disease from the field of biological warfare that could be used against rice or wheat?

Answer: There are no herbicidal chemicals used in Vietnam to destroy vegetation which have not been widely used in the United States in connection with clearing areas for agricultural or industrial purposes.

The term "defoliants" is used because it properly describes the purpose of its use; that is, to remove leaves from jungle foliage to reduce the threat of ambush and to increase visibility for U.S. Forces. This use of defoliants has saved many American and South Vietnamese lives.

There are several distinctions between a chemical herbicide and a biological plant disease. The biological agents are living plant pathogens, and may be spread beyond the area of attack by winds, insects or animals. Chemical herbicides do not spread in this manner beyond the area of attack. Further, more is known about the effects of chemical herbicides because of their widespread use throughout the world. Each use of herbicides or defoliants in Vietnam is approved by the U.S. Embassy and the government of the Republic of Vietnam.

Question 6. Do we have in practice or in policy an anti-food policy through the use of defoliants in Vietnam? What are our plans to restore the environment of Vietnam which has significantly altered as a result of our defoliant policy? Will we establish a commission similar to the Atomic Bomb Casualty Commission that operated in Nagasaki and Hiroshima after the war to study and correct some of the damage that we caused?

Answer: The U.S. has a carefully limited operation in South Vietnam to disrupt the enemy's food supply. It is limited to the attack of small and usually remote jungle plots which we know the VC or NVA are using. Usually these plots are along trails or near their base camp areas. Each such operation is approved by the U.S. Embassy and the government of the Republic of Vietnam. Enemy caches of food, principally rice, are also destroyed when it cannot be used by the South Vietnamese. These limited Allied activities have never, in any single year, affected as much as one percent of the annual food output of South Vietnam.

Question 8. What precautions are taken to insure that chemical and biological warfare experiments are of no danger to the public? What precautions did not work at the sheep kill at Skull Valley in Utah? What precautions are taken when the Army moves chemical agents from a plant to a storage depot or to a port of embarkation or an airfield? What are the risks if there is a train wreck? Are the agents being transported volatile? Is the statistical probability of an accidental discharge of poisonous chemicals greater than of the probability of a nuclear explosion from, say, an ABM warhead? What can be done to counter the damage that would be done if there were an accidental discharge of a chemical agent while in transit through a city or town?

Answer: Strict safety practices are enforced at laboratories which do research on CB agents. Elaborate systems of airtight hoods, air filtration and waste decontamination are employed. These precautions and procedures are reviewed by the U.S. Public Health Service as well as by Department of Defense safety experts. The equipment and building designs developed at the U.S. Army Biological Laboratories, for example, have been generally accepted throughout the world as the ultimate in safety for the investigation of infectious diseases.

With regard to the extremely unfortunate Skull Valley incident, the exact chain of events is still not completely understood. A freak meteorological situation was probably a major contributing factor. This matter has been carefully reviewed by a special advisory committee appointed by the Secretary of the Army and chaired by the Surgeon General of the U.S. Public Health Service. A copy of this report is included for your information. This committee has made a number of recommendations concerning test limitations, toxicological and environmental investigations, added meteorological facilities, and a permanent safety committee. All of these recommendations are being followed.

Movement of chemical agents is governed by rules and procedures established by the Interstate Commerce Commission and the U.S. Public Health Service. The material is shipped in special containers; these containers are put on pallets if necessary and fully restrained, and an underlying layer of sand is used to reduce vibration and to absorb agent in the highly unlikely event of leakage. All shipments are accompanied by a trained escort detachment equipped with decontaminating and first aid equipment. Routes are carefully planned to avoid populated areas to the greatest extent possible; and, where they cannot be avoided, to move through them carefully and with as little delay as possible.

The precautions taken--the use of special trains, careful routing, controlled speeds, and other measures--make a train wreck extremely unlikely. However, even further steps are taken to minimize any hazard that might result from an accident. Buffer cars are included in the train, the escort detachment is distributed in different cars to provide prompt full-train coverage in emergencies, and transit time through populated areas is minimized. Although the agents are not inert, it is important to note that transported agents are neither volatile nor in the gaseous state. They are liquid, and the most volatile is about eight times less volatile than water. The containers are not under pressure, and nerve agents are rapidly rendered harmless by fire.

The comparison of statistical probabilities of a railroad accident and subsequent discharge of chemicals or accidental explosion of a nuclear device is very difficult because of the differences between them. Extensive precautions are taken to provide safety in both. There has never been either an accidental nuclear explosion or an accidental discharge of chemical agent during shipment. This absence of data makes it impossible to calculate the respective probabilities of accident.

Question 11. Do we have a rapid warning system that will alert the public to a chemical or biological attack?

Answer: The U.S. has developed chemical detection and warning instruments which could provide the components for a national alarm system. They have not been deployed to build such a system. However, as noted above, it is believed that the threat of strategic chemical attack is not great. Warning against biological attack is much more difficult technologically. Recently, there has been success with a prototype instrument which would provide some biological warning capability. R&D efforts in this area will be continued.

Question 12. Does the Army use any discretion as to what types of institutions should be encouraged or pressed into accepting funds for work in chemical and biological warfare? Does the Army see any conflict in asking a purely civilian institution, such as the Smithsonian, to do work that might conflict with the institution's activities abroad?

Answer: The Army certainly uses discretion in selection of all of its contractors. The advice of the Smithsonian Institution was sought in identifying a suitable institute to do this work. As a result, they submitted a proposal, which was accepted. As a direct consequence of this work, there have been 45 papers written by Smithsonian scientists and published in the scientific literature. This has been a remarkably productive scientific investigation brought about by a coincidence of interests in the fauna of the area.

The Smithsonian Institution was never asked to do, nor did they do, any "military" chemical and biological warfare research. It carried out scientific investigations appropriate to its charter and objectives, and published the significant findings in the scientific literature. These results are available for use by the Army, by any other government agency, or by any nation or scientist wishing to do so.

Question 13. Would the United States or any other major nation be risking its national security by dispensing with chemical and biological weapons altogether, especially in view of their many skills with weapons that have already been used?

Answer: It was pointed out in the discussion of Question 1 that CB weapons are, in many military situations more effective than conventional weapons. Thus, a nation which lacked CB weapons and could not deter or counter their use would have to consider more extreme measures. Unilateral CB disarmament would adversely affect a nation's deterrent capability, it would decrease its response options, and it would ultimately seriously degrade its CB defensive capability. The U.S. is committed, as President Nixon wrote recently, to "exploring any proposals or ideas that could contribute to sound weapons." The Defense Department is fully in accord with mutual arms control efforts and supports them in every way possible. For example, members of the Department of Defense will join representatives of the State Department and Arms Control and Disarmament Agency in meeting in late April to assist the United Nations Secretary General's group of 14 consultant experts prepare a report to the Secretary General of the UN on the characteristics of CB weapons.