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Memo FROM JOSHUA LEDERBERG

Subject: Anthrax Epidemic in Sverdlovsk 1979, and Soviet Compliance with the BW Disarmament Convention; CISAC-Mascaw 68.8 86

The Biological Weapons (BW) Disarmament Convention went into force in 1972. Since that time a number of incidents have raised questions about Soviet compliance. One of the principal incidents that has hindered confidence in this respect was an outbreak of anthrax which occurred in March 1979 in Sverdlovsk, USSR. According to emigre reports the outbreak stemmed from an accident in a military facility doing illegal work on BW. By their account an airborne plume of anthrax spores caused a widespread epidemic of pulmonary anthrax among military and civilian personnel in Sverdlovsk. Until recently, despite numerous demarches by the United States Government, the Soviets have refused to discuss this incident in any detail, claiming that it was a public health matter of purely internal concern and therefore out of the purview of the obligations for consultation under the BW Convention. The Sverdlovsk incident, and especially the Soviet refusal to consult about it, has remained high on the list of alleged treaty violations on the part of the Soviet Union and has figured in several policy statements by senior US officials.

The same subject has been on the agenda of the National Academy of Sciences Committee on International Security and Arms Control (CISAC) for a number of its recent sessions. This committee meets jointly with peers from the Soviet Academy of Sciences. During the past 18 months there has been an apparent increase in flexibility on the Soviet part and they had agreed sometime ago to convene a meeting in Moscow. This was held October 8th through 10th 1986; by design experts were available for further discussion.

The Sverdlovsk epidemic also was briefed by Dr. Antonov at the BW Convention Review Conference held in Geneva the latter part of September. Finally the Soviets invited Dr. Matthew Meselson of Harvard University, to visit Moscow for three days at the end of August, and provide him a very detailed briefing on their version of the 1979 epidemic. These moves seem to be related to 1) a general amelioration of Soviet policy on the release of information about catastrophic events: a policy that was tested and in due course complied with after the Chernobyl tragedy. 2) the looming review conference on BW and concurrent talks on CW arms control.

Attached herewith are some documents pertaining to the 1979 Sverdlovsk event as portrayed by Soviet sources, and my personal comment on them based on our CISAC visit to Moscow in October. They now detail that epidemic as intestinal anthrax, attributed to the distribution of contaminated beef. Many cattle were fed a bone meal supplement that had been improperly sterilized and had been produced from naturally infected carcasses. Anthrax is known to be endemic (or rather enzootic) in the northern Soviet Union and has been a low level but recurrent problem among cattle and other livestock. Sporadic cases of cutaneous and intestinal anthrax have been reported over many years from the Soviet Union. The 1979 outbreak is by far the largest and most vicious epidemic

so far recorded. The scope of the epidemic is attributed to the fact that there was a primary focus of many infected cattle and the illegal distribution of beef from these carcasses without proper veterinary supervision.

My personal conclusion from that evidence, taking account of other evidence from US sources, is that the present Soviet account of the epidemic is plausible on its face and internally consistent. The contrary testimony of the emigres is for the most part hearsay. While it may be given in good faith it can hardly be said to be grounded on a professional understanding of the different forms of anthrax. Wild rumors do spread around every epidemic; and this one conjoined with the widely held belief that the military contonment No. 19 is a BW development or production facility. Remaining evidence that would link the epidemic to an accident in the facility is quite thin and subject to arguable interpretations The current Soviet account is and may have other explanations. very likely to be true; and at the very least the evidence that they have presented gravely impairs the credibility of a portrayal of the epidemic as directly related to illegal activity in Sverdlovsk.

The latter remains the central question: US concerns that the USSR continues to do secret military work on BW are not alleviated in any way by removing the epidemic per se from the list of allegations. I believe that it would be in the interest of the credibility of our arms control initiatives for the US to continue to press for satisfaction on the primary issue, but no longer to insist that the epidemic is important evidence for such violations.

It would be possible to pursue the veracity of their account of the epidemic by raising further questions with their Ministry of Public Health. It is unlikely however that any amount of evidence they are likely to provide will induce a public reversal on the part of people here who have taken strong positions. Hence, it may or may not be worthwhile to spend much capital in that pursuit. This discussion of the epidemic does distract from the central issue as to the nature of the secret facilities that we have questioned.

One other topic of discussion of the CISAC group was a proposal to strengthen US-USSR scientific cooperation and exchanges, in the biomedical areas most germane to BW and the enforcement of the BW Convention. I would urge the most sympathetic consideration be given to these initiatives. They provide the most likely avenue for both sides to have an accurate and uninflamed estimate of the continued work in biomedical research in each country. I have no doubt that the overwhelming majority of biomedical scientists in the USSR, as in the US, abhor the very concept of biological warfare. If given any opportunity and encouragement they would weigh in favor of compliance with, and strengthening of, the BW Disarmament Convention.