

CONFERENCE OF THE COMMITTEE ON DISARMAMENT

CCD/497

29 June 1976

Original: ENGLISH

UNITED STATES OF AMERICA

Verification of destruction of declared stocks of chemical warfare agents

In working paper CCD/436 (16 July 1974), the United States delegation described the procedures employed in the disposal of mustard gas at Rocky Mountain Arsenal and outlined some preliminary ideas as to how such a disposal operation could be verified. Since that time, a number of delegations have expressed interest in on-site monitoring of destruction of chemical warfare stocks. The basic purpose of on-site monitoring would be to confirm information provided as to the type and quantity of agent destroyed. To satisfy this purpose, it would be necessary to specify, in detail, what general technical methods and procedures would be used in the confirmation process.

This paper presents in greater detail the preliminary results of our evaluation of possible methods for carrying out on-site monitoring. These ideas are, of course, subject to further refinement.

The techniques discussed below are based on two premises: (1) that the chemical agent would be destroyed either thermally (incineration) or chemically (by treatment with caustic, for example), and (2) that the disposal facility would be similar to that described in CCD/436. If other disposal methods were employed or fundamentally different types of facilities used, substantial changes might be required in the verification techniques applied. Even if major revisions are not necessary, some adjustments may be needed to adapt the basic techniques to a specific situation.

In principle, the objective of confirming the declaration of the type and quantity of chemical agent destroyed is similar to the objective of ensuring accountability in facilities which process nuclear materials. Consequently, some of the techniques which have been developed for safeguarding nuclear material appear to be adaptable for use in CW verification.

Discussion of verification at a specific destruction facility should begin while the destruction operation is in the planning stage. Representatives of the facility management and the observers would co-operate in working out detailed arrangements needed for that facility.