Ad Hoc Committee on Chemical Weapons

China: Working Paper on Calculation of Elimination Quantity

The method of calculating the elimination quantity should be in keeping with the principles for the elimination of chemical weapons as they appear in CD/636, Appendix I, Annex IV.

1. Basic Concepts:

   1.1. Toxicity Intensity (TI): the weight of half the number of exposed lives harmed (in the case of harmful agents) or killed (in the case of lethal agents) by one milligramme of a CW agent.

   $$TI = \frac{1}{LD50} \left(or \frac{1}{ED50}, or \frac{1}{LCt50}, or \frac{1}{ECt50} \right)$$

   1.2. Stockpile Equivalent (SE): the product of the stockpile weight (Ws) of a CW agent and its Toxicity Intensity.

   $$SE = Ws.TI$$

2. Formula for Elimination Quantity (We):

   $$We = K.SE \ total \ .TI^{-1}$$

   where:

   We: the actual weight of a CW agent to be eliminated by a State in one phase of elimination

   K: the agreed elimination percentage in that phase

   SE total: the total Stockpile Equivalent of the State

   TI: the Toxicity Intensity of the CW agent to be eliminated in that phase.

Note.- The term "Chemical Warfare (CW) agent" is used in this working paper. Any eventual wording will depend on consensus opinion on the definition of chemical weapons.

   */ Reissued for technical reasons.