

substances than actual warfare agents will be destroyed this is of minor importance as it obviously has to be a substance with a comparable toxicity and thus also to some extent usable as a warfare agent.

Substances with a low toxicity which can also have civilian use could of course always be used in war with some effect, e.g. phosgene, cyanides and even chlorine as has been pointed out on many occasions. However, since stocks for civilian purposes would be kept anyway, there would be no sense in trying to verify destruction of dual-purpose agents with a relatively low toxicity. If abnormally large stocks of such agents were found the most obvious way of disposal would be through the chemical production processes for which they normally are used.

The reliability of the toxicity and quantity determination will depend upon randomized sampling methods. Thus the sampling routines must be constructed and performed with great care in order to get representative samples. The fact that samples will have to be taken does not imply that knowledge of the substance to be destroyed has to be passed on. However, the agent containers (for bulk stockpiles or as munition) must be allowed to be measured and counted by the inspection team. Different means of evading a determination of the amount of agent to be destroyed have been pointed out in the United States Working Paper CCD/436. On the other hand such attempts could most probably be revealed or indicated by the randomized sampling.

Standardized handling of the samples could guarantee that no parts of samples were withheld by verification teams for a later, more revealing analysis. One could even conceive of a scheme allowing the sampling and experimental work to be performed by a national verification team under close surveillance of international observers.

The toxicity determination is preferably performed by simple tests on animals: */

- (a) injections of series of diluted solutions of the substance in the belly of mice (intraperitoneally);
- (b) application of series of diluted solutions on the skin of mice (percutaneously).

*/ For a discussion of the method see e.g. CCD/435, 16 July 1974, working paper on toxicity of chemical warfare agents, by the United States delegation.