

One spectrometric technique is sufficient for unambiguous identification if the result fully corresponds to that in the database spectrum. GC-MS, GC-FTIR or IR with multivariate software package can be used for this purpose.

Semiquantification can also be performed with the same instruments.

The same instruments can be used to analyse any samples collected in the destruction facilities, be they from munitions, destruction process or from destruction products although they may need to be supplemented with other techniques such as ion chromatography.

2. Process monitoring

It is likely that agent destruction method combinations may not be the same in all countries wishing to destroy chemical weapons. Therefore the type and amount of process control information is going to vary from country to country.

Although the inspectors will endeavour to use to maximum effect information available from the process control it is likely that they need to use monitoring instruments.

The foreseen destruction methods are direct incineration and detoxification before incineration. In the latter case incineration of the detoxified agent must also be verified.

Mass balance in the destruction facility could be determined by the number and weight of the fill of the munitions and the storage tanks and the weight and composition of destruction products. All the munitions are counted and weighed before and after draining.

3. Seals, surveillance and containment

The most important role of the S/C equipment in the destruction facilities is in monitoring the inactive status of the facility (including the possible storage facility connected with it) whenever it is not in active operation.