

4) Two possibilities are envisaged in the verification of alleged use:

a) The minimum requirement is to have equipment for sample collection and detection of the best places to collect the samples (military type detection equipment<sup>1</sup>).

b) If feasible, analytical equipment could be brought on-site for preliminary identification of the schedule 1 chemicals to facilitate selection of laboratories for unambiguous identification and transportation of samples. This equipment would require own electricity supply unless the base camp can be established at a site where electricity is available.

5) In ad hoc verification activities an instrument capable of quick identification of schedule 1 compounds would be required. Here a mobile mass spectrometer used in ion monitoring mode but allowing immediate scanning of a spectrum would be the best alternative.

6) In challenge inspections the instruments should be as sensitive and reliable as possible. The future development of mass spectrometry (ion trap detector) may lead to mobile MS/MS. This development trend is promising. Further development should be stimulated, especially the miniaturization of the instruments.

#### F. Process monitoring

The purpose of process monitoring in chemical industry is to have good control over the process to allow the industry to operate optimally, to provide quality control of the products and to protect the environment.

The physical variables such as temperature, pressure, weight and flow can be controlled very accurately. Chemical variables include e.g. raw materials. These variables have to be tightly controlled to ensure that the desired product is effectively produced in a required quantity. This requires also adjustment of process parameters if needed during production.

1) Military detection equipment will also be necessary for the safety reasons of the inspectors