

## SUMMARY

The collection and handling of samples is an important part in verification of a chemical weapons convention. Reliable results from sophisticated analytical equipment can only be obtained if the samples have been collected and treated properly. This report gives complete procedures for sampling and sample handling in connection with both verification of alleged use and verification of alleged production in a chemical facility.

The recommended operating procedures presented here are based on extensive field testing at the Norwegian Defence Research Establishment during the last ten years in order to reveal problems which do not arise in laboratory experiments.

The procedures deal with all parts of sampling and sample handling, including localization of the contaminated area, the amounts and sizes of samples which should be collected, and the preferred sample materials. Methods for packing, securing and transport of samples are also described together with sample handling in the laboratory.

One of the most important parts of the sampling procedure is proper documentation of the samples, sampling site and sampling procedures. A form has therefore been drawn up in which all information obtained during sampling should be written. A transport log which should follow the samples from the sampling site to their destination has also been worked out and is presented in this report.

The last part of sample handling is treatment of the sample in the laboratory. Procedures for sample homogenization, splitting and preparation before the final analysis have been developed.

It is important to have proper equipment available for sample collection and sample handling. A list of suitable equipment has therefore been included in this report.