

8. Retention, stockpiling or other acquisition of chemical agents and weapons. This activity is closely associated with agent production, although the treaty would also ban the transfer of chemical agents and weapons from one nation to another. Stockpiles once acquired could be readily hidden, especially if they involve binary munitions. Even with routine on-site inspections, verification would be very difficult. International measures, other than information exchange might therefore be limited to challenge mechanisms. Experts and sampling would be required for on-site inspections.

9. Offensive military training or other activities in preparation for undertaking chemical warfare. It has been generally agreed that defensive activities should not be banned and as a result an aggressive intent will be very difficult to verify. While offensive military activities should be included in the ban, international monitoring could be limited to informal exchanges and responses to challenge situations.

10. Use of chemical weapons for war purposes including dual purpose agents and binary components. In many instances the effects of chemical agents used in war will be apparent and verification will be provided by the antagonists. However in some instances involving isolated battles or limited wars and insurrections in remote areas few outside observers will be present and reports of clandestine use of chemicals must be carefully weighed by the international community. If reports are substantial, then the nations involved should be requested to allow samples to be taken at the site by international inspectors within 48 hours of an event if possible so that the use or non-use of chemical weapons could be verified.

SUMMARY OF VERIFICATION REQUIREMENTS

Through this analysis of specific activities it is apparent that remote detection, as might be available through "national technical means" or at considerable expense to an international verification agency, may be sufficient to arouse suspicions which could lead to challenge situations, but is not likely to be sufficient to demonstrate non-compliance with a treaty. To provide assurance and security for all nations, some on-site inspections would be necessary although it would seem that these occasions should not be an unbearable intrusion. In most instances such on-site visits could be to the distinct advantage of the nation being inspected.

To verify initial declarations and the dismantling of production plants, on-site inspections would require the presence of some international personnel though not necessarily technical experts. For the activities to be banned including development, production, stockpiling and use, the provision of technical means of verification on a routine basis by an international agency would pose overwhelming logistic difficulties. Information and data on these activities should be routinely exchanged through an international verification agency but on-site inspection could be limited to unilateral invitations or challenge situations. For challenge inspections, appropriate experts must be involved and some sampling must be permitted. For the destruction of declared stockpiles intrusion will be greatest as guaranteed verification will require continuous on-site monitoring with periodic sampling and analysis by expert international inspectors.