

cholinesterase inhibitors, therapy with parasympatholytics ; there are developing perspectives of the treatment or prophylaxis of intoxications with cholinesterase inhibitors (hemodialysis, hemoperfusion, administration of antibodies against organophosphates, new types of antidotes containing both parasympatholytic and reactivator structures, new approaches to pharmaceutical procedures of administration, etc.).

In the United States, the safety and environmental requirements for CW destruction facilities (13) must comply with all existing national environmental and safety regulations/standards.

The general design criteria which US chemical demilitarization facilities must satisfy are the following : no uncontrolled emissions, no process liquid discharges, continuous agent monitoring, personnel interfaces minimized, performance of hazard risk analysis and mitigation. The destruction of CW is regulated by several environmental regulations : National Environmental Policy Act, Resource Conservation and Recovery Act, Toxic Substances Control Act, Clean Air Act and State Act Quality Regulations.

Approaches were also proposed by USSR (14) concerning the safety of people and the environment, with emphasis of the need for the fullest possible exchange of information with specialists on key matters in CW destruction.

From most of the past and existing destruction programs, there is one aspect however that is of paramount importance : the involvement of the public from the very start of the process of destruction, in order to allay its worries as regards the setting-up of the destruction facility and the subsequent environmental impact. Dialogues and information exchange are necessary to the full acceptance.

#### V - NEW AND EMERGING TECHNOLOGIES

Several new and emerging technologies were mentioned, which are being studied and evaluated as candidate approaches to CW destruction in various countries and which include enzymatic degradation, adiabatic compression and plasma technologies. Experiences gained thus far with respect to specific chemicals were reported.

It was concluded that some of the new approaches, most of which are primarily aimed at decontamination and environmental purposes rather than large-scale CW destruction, could become very important in the future. Therefore, research in these areas should be encouraged. Typical applications would include toxic waste treatment and decontamination of soil, harbour sludges and water.

In the specific CW context, however, new and emerging technologies were generally assessed to be in the early stages and require further extensive studying and testing. It became evident