

- (c) Joint programs for disposal of hazardous materials to ensure that these materials such as pesticides, contaminated petroleum products, contaminated sludge and dredge spoils and industrial wastes are properly transported and disposed of. Every effort shall be made to implement these programs by 1980.

4. *Monitoring.* Monitoring and research programs in support of the Great Lakes International Surveillance Plan should be established at a level sufficient to identify:

- (a) Temporal and spatial trends in concentration of persistent toxic substances such as PCB, mirex, DDT, mercury and dieldrin, and of other substances known to be present in biota and sediment of the Great Lakes System;
- (b) The impact of persistent toxic substances on the health of humans and the quality and health of living aquatic systems;
- (c) The sources of input of persistent toxic substances; and
- (d) The presence of previously unidentified persistent toxic substances.

5. *Early Warning System.* An early warning system consisting of, but not restricted to, the following elements shall be established to anticipate future toxic substances problems:

- (a) Development and use of structure-activity correlations to predict environmental characteristics of chemicals;
- (b) Compilation and review of trends in the production, import, and use of chemicals;
- (c) Review of the results of environmental testing on new chemicals;
- (d) Toxicological research on chemicals, and review of research conducted in other countries;
- (e) Maintenance of a biological tissue bank and sediment bank to permit retroactive analysis to establish trends over time;
- (f) Monitoring to characterize the presence and significance of chemical residues in the environment;
- (g) Development and use of mathematical models to predict consequences of various loading rates of different chemicals;
- (h) Development of a data bank for storage of information on physical/chemical properties, toxicology, use and quantities in commerce of known and suspected persistent toxic substances.

6. *Human Health.* The Parties shall establish action levels to protect human health from the individual and interactive effects of toxic substances.