

ANNEX 1

SPECIFIC WATER QUALITY OBJECTIVES

1. *Specific Objectives.* The specific water quality objectives for the boundary waters of the Great Lakes System are as follows:

- (a) *Microbiology.* The geometric mean of not less than five samples taken over not more than a thirty-day period should not exceed 1,000/100 millilitres total coliforms, nor 200/100 millilitres fecal coliforms. Waters used for body contact recreation activities should be substantially free from bacteria, fungi, or viruses that may produce enteric disorders or eye, ear, nose, throat and skin infections or other human diseases and infections.
- (b) *Dissolved Oxygen.* In the Connecting Channels and in the upper waters of the Lakes, the dissolved oxygen level should be not less than 6.0 milligrams per litre at any time; in hypolimnetic waters, it should be not less than necessary for the support of fishlife, particularly cold water species.
- (c) *Total Dissolved Solids.* In Lake Erie, Lake Ontario and the International Section of the St. Lawrence River, the level of total dissolved solids should not exceed 200 milligrams per litre. In the St. Clair River, Lake St. Clair, the Detroit River and the Niagara River, the level should be consistent with maintaining the levels of total dissolved solids in Lake Erie and Lake Ontario at not to exceed 200 milligrams per litre. In the remaining boundary waters, pending further study, the level of total dissolved solids should not exceed present levels.
- (d) *Taste and Odour.* Phenols and other objectionable taste and odour producing substances should be substantially absent.
- (e) *pH.* Values should not be outside the range of 6.7 to 8.5.
- (f) *Iron (Fe).* Levels should not exceed 0.3 milligrams per litre.
- (g) *Phosphorus (P).* Concentrations should be limited to the extent necessary to prevent nuisance growths of algae, weeds and slimes that are or may become injurious to any beneficial water use.
- (h) *Radioactivity.* Radioactivity should be kept at the lowest practicable levels and in any event should be controlled to the extent necessary to prevent harmful effects on health.

2. *Interim Objectives.* Until objectives for particular substances and effects in the classes described in this paragraph are further refined, the objectives for them are as follows:

- (a) *Temperature.* There should be no change that would adversely affect any local or general use of these waters.