

## **Precautionary strategies for persistent toxic pollutants and radionuclides**

**Problem:** Despite the commitment of the GLWQA to zero discharge and virtual elimination of persistent toxic substances, their presence and accumulation in our water bodies continues to threaten all life within the ecoregion. These harmful substances, such as endocrine disruptors, damage the ecosystem and have devastating impacts on the health of wildlife and humans. Toxic contamination also results in restrictions on drinking water and on the consumption of fish and wildlife, which cause negative impacts, particularly to Indigenous communities, communities of colour and low-income people.

**Need:** All persistent toxic substances need to be eliminated from the Great Lakes and St. Lawrence ecoregion through an anticipatory approach to ensure that they do not continue to pose a threat to all life. The approaches that the Parties to the GLWQA have taken have been reactive, not precautionary, and are ineffective in ever meeting the goals of zero discharge and virtual elimination of persistent toxic substances. There is a pressing need to ban more of these substances, substitute their use with non-toxic compounds, and to remove, treat and contain toxic substances already in our lakes and rivers. The small number of chemicals of concern defined by government needs to be expanded to include radionuclides as well as emerging toxic substances and microplastics.

**Proposed outcome:** GLEN recommends that the Parties measure the extent to which the principles of zero discharge and virtual elimination are applied in the Great Lakes and St. Lawrence basin and issue an annual report on their success in preventing new discharges and removing old accumulations. Within this strategy, focus would be on product or process redesign to eliminate the use of toxic substances as well as to prevent new toxic substances being used as substitutes for banned pollutants. In addition, the small number of chemicals of concern defined by government should be expanded to include radionuclides as well as emerging toxic substances and microplastics. There is also an urgent need to assess the adequacy of methods used for contaminated sediments, particularly over the long term, given evidence that sediment control mechanisms can become on-going leaking sources of persistent toxic substances to the ecoregion over time.

**Proposed GLEN activities:** Develop a strategy with other ENGOs, Indigenous communities, health organizations and community leaders to lobby the Parties as well as state, provincial and municipal governments to enact zero discharge and virtual elimination through changes to public policy. Mechanisms will include new legislation and regulations as well as changes in current legislation to ensure that these principles are embedded in approvals made at all levels of government.

**GLEN's capacities relevant to this topic:** Many of GLEN's members have worked on zero discharge and virtual elimination and persistent toxic substances for decades, and are on the leading edge in thinking through solutions to these issues.