

## **Binational Screening Criteria for Nominated Chemicals of Mutual Concern under Annex 3 of the Great Lakes Water Quality Agreement**

### **Introduction:**

At the national level, the Government of Canada continues to assess and manage the risks posed by chemicals through its Chemicals Management Plan under the Canadian Environmental Protection Act, 1999. The United States prioritizes, evaluates and risk manages existing chemical substances in commerce, under the amended Toxics Substances Control Act (TSCA21). Chemicals of Mutual Concern are chemicals that Canada and the United States have designated as such, in order to take additional cooperative and coordinated measures to reduce their release in the Waters of the Great Lakes.

These screening criteria were developed by Environment and Climate Change Canada and US Environmental Protection Agency to provide a consistent framework for reviewing nominated Chemicals of Mutual Concern (CMCs) under Annex 3 of the Great Lakes Water Quality Agreement (GLWQA). Any chemical nominated will undergo an initial screening, using a weight of evidence approach, that involves consideration of multiple sources of information and lines of evidence that are assessed and integrated using various qualitative and quantitative methods.

If the weight of evidence suggests the substance should be nominated as a candidate CMC, a more thorough evaluation of the chemical will be undertaken. This will involve the production of a binational summary report with detailed information on: environmental fate and transport; sources and releases into the Great Lakes; existing management and control of Policies, Regulations and Programs; and a gap analysis. This binational summary report will end with one of three possible decisions: 1) a recommendation that the candidate chemical be nominated as a CMC; 2) the candidate chemical should not be nominated as a CMC at this time; or 3) there is insufficient information to make a decision at this time. If it is concluded that there is insufficient information, Annex 3 will take steps to promote: additional research, monitoring, or assessment, as needed.

Criteria:

#### **TOXIC: Is the chemical toxic, persistent, and/or bioaccumulative?**

- a. Has the chemical been found to be toxic?
- b. Is the substance persistent and/or bioaccumulative\*?

*A chemical which is a) considered toxic, and b) persistent and/or bioaccumulative is more likely to be identified as binational CMC.*

#### **RELEASE: To what extent is the chemical released in the Great Lakes Basin?**

- a. Are there releases to water or air of the chemical?
- b. Are releases likely to increase in the future due to increasing manufacture, import, or use in Canada or the U.S.?

*A chemical which is a) being released in the Great Lakes and/or b) increasing in manufacture, import, or use is more likely to be identified as a binational CMC.*

**LEVELS: Are levels of the chemical harmful, or likely to become harmful, in the Great Lakes environment?**

- a. Do measured concentrations of the chemical in the Great Lakes environment (air, water, sediment, and/or biota) exceed benchmarks or guidelines, including fish consumption advisory levels, water quality standards, etc.?
- b. Are concentrations of the chemical in the Great Lakes environment (air, water, sediment, and/or biota) increasing with statistical significance, suggesting early action is warranted?

*A chemical which is a) currently at concentrations that cause impacts or is b) likely to cause impacts in the near future due to increasing concentrations in the Great Lakes environment is more likely to be identified as binational CMC.*

**ROUTE OF EXPOSURE: Are the Great Lakes a predominant route of exposure to humans or wildlife for this chemical? Are the impacts, or likely impacts, caused by routes of exposure via:**

- a. Great Lakes water?
- b. Great Lakes food web?

*A chemical whose route of exposure to humans or wildlife is predominantly via a) Great Lakes water or b) the Great Lakes food web is more likely to be identified as a binational CMC.*

**SCALE: Does the geographic scale of contamination have binational significance?**

- a. Is the contamination currently, or likely to become, lakewide or multi-lake in scale as opposed to localized?
- b. Does the contamination have the potential to cause binational transboundary impacts?

*A chemical that is a) lakewide or multi-lake in scale and/or b) likely to cause binational impacts is more likely to be identified as a binational CMC.*

**MANAGEMENT: To what extent are the releases of the chemical controlled/managed?**

- a. Are programs and management actions for the chemical currently in place at the local, state/provincial, tribal, Indigenous, federal or international level?
- b. Are current actions adequate, and/or do gaps exist?

*A chemical that is not effectively managed would be more likely to be considered a binational CMC.*

In Canada

\* The criteria for persistence and bioaccumulation are defined under the CEPA 1999 Persistence and Bioaccumulation Regulations.

In the U.S.

\* In the context of these binational screening criteria under Annex 3 of the GLWQA, U.S. EPA will refer to the guidance criteria for persistence and bioaccumulation from the U.S. EPA policy statement, Category for Persistent, Bioaccumulative, and Toxic New Chemical Substances (see <https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/policy-statement-new-chemicals>).