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 chemical substances 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 chemical substances 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 (ECCC) and U.S. Environmental Protection Agency (U.S. EPA) 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 substance nominated will undergo an initial screening, using a weight of evidence approach, that involves consideration of multiple sources of information and lines of evidence. Qualities of the data will be identified (for example: strength and relevance), along with qualitative descriptors, to help make a decision. In order to support a conclusion, the significance of the relevant lines of evidence is considered. Where there are multiple lines of evidence, greater weight will be placed on stronger and more relevant lines of evidence.

If the weight of evidence suggests the chemical substance warrants further consideration as a candidate CMC, a more thorough evaluation of the chemical substance will be undertaken by ECCC and U.S. EPA. 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; Policies, Regulations and Programs for management and control of the chemical substance; and a gap analysis. This binational summary report will end with one of three possible decisions: 1) that the candidate chemical substance be designated as a CMC; 2) that the candidate chemical substance should not be designated 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, the Annex 3 Sub-Committee will take steps to promote additional research, monitoring, or assessment, as needed.

Criteria:

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

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

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

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

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

a. Are measured concentrations of the chemical substance in the Great Lakes environment (air, water, sediment, and/or biota) nearing, meeting or exceeding benchmarks or guidelines for protection of wildlife and humans, including fish consumption advisory levels, water quality standards, etc.?
b. Are concentrations of the chemical substance in the Great Lakes environment (air, water, sediment, and/or biota) increasing, suggesting early action is warranted?

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

a. Great Lakes water?
b. Great Lakes sediments?
c. Great Lakes food web?

SCALE: Does the geographic scale of the levels of the chemical substance in the Great Lakes 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?

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

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

The weight-of-evidence approach will evaluate the totality of scientific evidence for each criteria. All information collected will be assessed, reviewed and integrated to form a meaningful conclusion for each chemical substance that is nominated.

<u>In Canada</u>

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

<u>In the U.S.</u>

* 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).