DRAFT Discussion Paper: GLBTS Future Focus

Background

This paper acknowledges a number of successes achieved by the Great Lakes Binational Toxics Strategy (GLBTS) over the first nine years of its history, identifies areas where the GLBTS has been effective, and builds on the lessons learned to propose a focus for the next 10 years of the GLBTS. Successes of the GLBTS include the following:

- The GLBTS has raised the visibility of the issue of persistent toxic substances, to stimulate and "validate" initiatives. The stakeholder forums, annual reports, workgroup reports, and sponsored meetings and workshops have raised the profile of toxic substances not only in the Basin but throughout both countries and internationally. For example, the GLBTS annual report documents progress on sediment remediation activities in the Great Lakes Basin. This focus has improved source identification and accountability, and has motivated research and preventive actions by government, industry, and academia. Another example is that the GLBTS has advanced the state of long range transport research.
- The GLBTS has promoted practical, achievable reductions through preventative and control actions using the precautionary approach. The GLBTS has been a major force in promoting acceptance of the idea that certain problematic substances those with extreme persistence and bioaccumulation need not be delayed pending exhaustive risk assessments, but rather should proceed on the basis of *a priori* recognition of the potential long-term environmental impacts. The GLBTS has been most effective when focused on release reduction actions that are voluntary and immediately feasible whether reduction of mercury in products, appropriate disposal of dioxin-contaminated PCP wood, commitments to accelerate decommissioning of PCB equipment, or promotion of more efficient wood-burning stoves. Notably, the GLBTS has contributed to the reduction of area sources, such as burning, by successfully promoting behavioral change.
- The GLBTS has provided coordination and collaboration opportunities for sharing information and experiences and providing linkages among programs at local, regional, national, and international scales. As well, the GLBTS has helped to develop networks to engage industry, trade and professional associations, and others, thus enabling *collaborative* voluntary action to achieve reductions beyond regulatory requirements. For example, the GLBTS has sponsored joint stakeholder meetings with the North American Commission on Environmental Cooperation (CEC), in order to foster a closer working relationship between these two international fora.
- The GLBTS has contributed to the collection and expanded dissemination of existing information, as well as the development of new information. The GLBTS has compiled a significant amount of information on the Level 1 substances that is readily accessible on the Internet, and has led to the development of new information, such as stack emissions

testing and long range transport modeling. For example, the GLBTS funded and distributed a study conducted by the Department of Energy Lawrence Berkeley Laboratory that modeled the long range transport of Level 1 substances to the Great Lakes Basin.

New Opportunities for GLBTS

Input from other Great Lakes for helped inform decisions on the future direction of the GLBTS.

- In 2001, the International Joint Commission (IJC) conducted a thorough review of progress under the GLBTS and presented advice and recommendations for the GLBTS to contribute toward achievement of the Great Lakes Water Quality Agreement goal of virtual elimination. The IJC review highlighted the GLBTS' strengths and weaknesses, and offered suggestions to extend and expand the future direction of the GLBTS, including:
 - o Maintain focus on pollution prevention;
 - Publicize the persistent toxics issue emphasizing virtual elimination and the impact on human and ecosystem health;
 - Actively promote broader awareness, engagement, and participation of Great Lakes stakeholders;
 - Develop sector based initiatives that deal with more than one contaminant at a time.
- In May 2004, the Great Lakes Regional Collaboration (GLRC) was initiated in the U.S. by Executive Order 13340 to develop, by consensus, a national restoration and protection action plan for the Great Lakes. In 2005, GLRC's toxic pollutant or PBT Team (one of eight issue teams) developed a number of recommendations, three of which propose that the GLBTS serve a coordinating role to assist in:
 - o virtual elimination of discharges of mercury, PCBs, dioxins, pesticides and other toxic substances to the Great Lakes;
 - o improved research, surveillance and forecasting capability; and
 - o addressing international sources.
- In 2005, Canada established a new approach, a Competitiveness and Environmental Sustainability Framework (CESF) to better align environmental and economic priorities. This will result in important changes in the way the environment is managed, including the establishment of Sector Sustainability Tables (SSTs). These tables are designed to be permanent multi-stakeholder tables representing an individual sector's full value-chain and a range of key stakeholder views. The purpose of the SSTs is to provide well-informed advice on how best to attain the highest level of environmental quality, in order to enhance the health and well-being of Canadians, preserve the natural environment, and advance long-term competitiveness. Five SSTs are currently in development for the following sectors: forestry, chemicals, mining, energy, and cross-cutting.

The Path Forward

Since its inception, the GLBTS has focused on the virtual elimination of toxic substances in the Great Lakes through cooperative and collaborative approaches by Great Lakes stakeholders. In the short term, it is recommended that the GLBTS retain its focus on toxic substances, finishing the job in the case of some substances, referring action to more appropriate management mechanisms for others, and modifying or expanding its role to more appropriately address the current state of toxics in the Basin.

- 1. Finish the job of virtual elimination of the Level 1 substances and promoting pollution prevention (P2) actions for Level 2 substances. Initially this will mean finishing work on the Level 1 substances and will be guided by the Level 1 management assessments. The GLBTS could also capture and report progress made in reducing the Level 2 substances. However, further success of the GLBTS will require engagement of additional stakeholders such as:
 - a. Local, state, and provincial entities. For instance, municipalities could be engaged on a number of issues (e.g., PCBs, mercury, burning). Successful programs, such as that in Thunder Bay, might be publicized or shared in appropriate forums and contacts provided to facilitate replication of successful efforts.
 - b. Agricultural stakeholders. For instance, to inform pathway intervention discussions.
- 2. **Design a framework to identify, adopt and address new and emerging chemicals**¹ **of concern in the Great Lakes Basin.** The first phase of the GLBTS focused on the assessment and management of the current Level 1 substances. The next phase of the GLBTS could expand that focus to:
 - a. Develop a management framework for considering new Level 1 or Level 2 substances. This framework would build upon the chemical screening, monitoring, forecasting, and research results discussed in item 3 below. New Level 1 substances would be assessed and managed according to the current four-step analytical process.
 - b. Increase emphasis on eliminating the release of Level 2 substances in a sustainable manner through P2 activities. These would be coordinated with other programs and efforts such as:
 - i. National sector-based programs in both Canada and the U.S.
 - ii. National Pollution Prevention programs such as Green Chemistry and Design-for-the-Environment.
 - iii. Local community programs.
 - iv. Ongoing P2 program capacity such as implementation of Environmental Management Systems by industry.

¹ Article II(a) of the Great Lakes Water Quality Agreement states "it is the policy of the Parties that: The discharge of toxic substances in toxic amounts be prohibited and the discharge of any or all persistent toxic substances be virtually eliminated. In the context of this discussion, these could be individual substances, groups of substances or mixtures of substances.

- c. Identify research and monitoring needs and innovative P2 activities for emerging substances of concern to the Great Lakes.
- 3. Expand the role of the GLBTS: Provide a Great Lakes Forum to review and exchange general information related to toxic chemicals in the Great Lakes Basin.

Consistent with the framework described in item 2 above, the GLBTS Forum could help to identify toxic chemicals that may warrant addition to the Level 1 or Level 2 substance lists, and/or may be amenable to P2 management approaches. The GLBTS Forum would also recognize when additional participation in the GLBTS is needed and engage the appropriate stakeholders, such as industry representatives or health and ecosystem toxicological experts to provide input on emerging chemicals and their impacts on the Basin.

Further, the GLBTS could play an expanded role in coordinating chemical screening, monitoring, forecasting, and research. In this proposed role, the GLBTS would:

- a. Work with national and regional screening programs.
- b. Coordinate monitoring programs and research in the Great Lakes region.
- c. Work with researchers to fill data gaps, develop new analytical methods, etc.
- d. Provide leadership in information dissemination. (SOLEC will provide one opportunity to report and publicize Great Lakes research on toxic chemicals and the factors that affect them. The GLBTS annual report is another avenue for reporting progress, for example on sediment removal efforts.)
- **4. Increase international outreach and coordination.** The GLBTS could support efforts to reduce continental and global sources of toxic substances to the Great Lakes Basin. Options to accomplish this include:
 - a. Influence reduction efforts through agreements with other countries, such as Environment Canada's work with China.
 - b. Continue to engage the CEC as a participant in the GLBTS and vice versa (i.e., GLBTS stakeholders participate in the development of CEC North American Regional Action Plans and United Nations Economic Commission for Europe's Long Range Transport of Air Pollutants).
 - c. Support international management and monitoring programs in coordination with UNEP because common regional and international issues may require international (intra- or extra-continental) agreements/collaboration.