

Existing Great Lakes PBT Programs

While a variety of national and statewide programs exist that promote the reduction and proper disposal of PBT chemicals, there are some programs that are specific to the Great Lakes. The following three programs are especially prominent.

Great Lakes Binational Toxics Strategy (BTS)

This program originated as a 1997 agreement between the United States and Canada known as the *Canada - United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes*. It was a response to concerns that the governments needed to take more direct action on the virtual elimination policy described in Article II of the *Great Lakes Water Quality Agreement (GLWQA)*. The BTS agreement established a series of reduction challenges. For example, the U.S. challenge for mercury is to “Seek by 2006, a 50 percent reduction nationally in the deliberate use of mercury and a 50 percent reduction in the release of mercury from sources resulting from human activity.”

The BTS has become the overarching PBT program for the Great Lakes and it integrates reduction efforts from a variety of stakeholders. Implementation of the BTS is being carried out by an Integration Workgroup and some specialized chemical workgroups. The 2003 progress report notes “Of seventeen GLBTS reduction goals set forth for the twelve Level I persistent toxic substances in April 1997, nine have been met, four will be met by the target timeline date of 2006, and the remaining four will be well advanced toward meeting their targets by 2006.”

Lakewide Management Plans (LaMPs)

LaMPs originate in Annex 2 of the GLWQA. Originally intended to address critical pollutants in the open waters of each Great Lake, LaMPs have evolved to include not only the critical pollutants, but other aspects of water quality improvement via the ecosystem management approach. While the LaMPs are planning programs, they are also implementing a variety of PBT voluntary reduction projects. For example:

- *Lake Superior*: As part of the Lake Superior LaMP’s *Zero Discharge Demonstration*, a 2004 project identified transformers suspected of containing PCBs at four utilities in the Minnesota portion of the basin and removed 71% of those transformers.
- *Lake Michigan*: Three Indiana steel mills participated in a Mercury Agreement Reduction Program that resulted in guidance for performing a mercury inventory and resulted in the removal of 3,700 pounds of mercury between 1999 and 2003 (roughly 80% of the mercury believed to be present in these facilities).
- *Lake Erie*: The P3ERIE Program in Pennsylvania has removed over three tons of mercury from businesses, schools and citizens in the greater Erie area since the inception of the program.

DRAFT

- *Lake Ontario*: Monroe County, New York, Department of Health implemented a mercury pollution prevention program for hospitals and dental offices that won a USEPA Region 2 Environmental Quality Award in 1999.

Note: While Lake Huron does not have a formal LaMP, the new Lake Huron Binational Partnership released the Lake Huron Binational Partnership Action Plan – 2004 to address basinwide concerns in Lake Huron.

Remedial Action Plans (RAPs)

Areas of Concern (AOCs) are addressed in a different section of the report (see Section ???). Unlike LaMPs, which focus on open waters, the AOCs represent the nearshore contaminated areas. According to the GLWQA Annex 2, the United States and Canada will develop Remedial Action Plans (RAPs) for each AOC. RAPs are expected to address the impairment of 14 beneficial uses at each AOC. PBTs can cause the following beneficial use impairments:

- Restrictions on fish and wildlife consumption;
- Tainting of fish and wildlife flavour;
- Degradation of fish and wildlife populations;
- Fish tumors or other deformities;
- Bird or animal deformities or reproduction problems;
- Degradation of benthos;
- Restrictions of dredging activities;
- Restrictions on drinking water consumption, or taste or odour problems;
- Added costs to agriculture or industry;
- Degradation of phytoplankton or zoo plankton populations; and
- Loss of fish and wildlife habitat.

RAP activities that address PBT impairments are mostly focused on sediment remediation although RAPs include other aspects of PBT management, including stormwater management and local source reductions. More information on sediment remediation is included in Section ??? and stormwater management is included under Section ????