

Great Lakes Water Quality Agreement Articles and Annexes related to Persistent Toxic Substances

Tricia Mitchell, Environment Canada

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Windsor, Ontario

Overview

- **Article II: Purpose**
- **Article III: General Objectives**
- **Article VI: Programs & Other Measures**
- **Annex 1: Specific Objectives**
- **Annex 10: Hazardous Polluting Substances**
- **Annex 12: Persistent Toxic Substances**
- **Annex 14: Contaminated Sediment**

Looking back to September...

- **GLBTS should discuss how to participate in, interact with, and/or advise the Review Workgroups**
- **GLBTS should consider how various aspects of the Agreement addressing PTSs could be combined, updated, streamlined, and/or enhanced, based on GLBTS work to date**
- **Planned review of effectiveness of GLBTS should feed into/integrate with the review of the Agreement**

From the opening lines...

Parties recognize the “need for strengthened efforts to address the continuing contamination of the Great Lakes Basin Ecosystem, particularly by persistent toxic substances.”

Article II: Purpose

- To restore and maintain the chemical, physical, and biological integrity of the waters of the Great Lakes Basin Ecosystem
- Parties agree to make a maximum effort to develop programs, practices and technology necessary for a better understanding of the Great Lakes Basin Ecosystem and to eliminate or reduce to the maximum extent practicable the discharge of pollutants into the Great Lakes System

Goal for PTS: *Virtual Elimination*

Article III: General Objectives

- **Waters should be free from materials and heat entering the water as a result of human activity that will produce conditions that are toxic or harmful to human, animal, or aquatic life**

Article VI: Programs & Other Measures

- **Persistent Toxic Substances**
- **Surveillance and Monitoring**
- **Pollution from Contaminated Sediments**

Annex 1: Specific Objectives

■ CHEMICAL

▫ Persistent Toxic Substances

PCBs – *The concentration of total polychlorinated biphenyls in fish tissues (whole fish, calculated on a wet weight basis), should not exceed 0.1 micrograms per gram for the protection of birds and animals which consume fish.*

Lindane – *The concentration of lindane in water should not exceed 0.01 micrograms per litre for the protection of aquatic life. The concentration of lindane in edible portions of fish should not exceed 0.3 micrograms per gram (wet weight basis) for the protection of human consumers of fish.*

Annex 10: Hazardous Polluting Substances

- Parties shall maintain two lists
 - Substances known to have toxic effects
 - Substances potentially having toxic effects
- Ensure that these lists are continually revised in the light of growing scientific knowledge
- Develop and implement programs and measures to minimize or eliminate their risk of release to the Great Lakes System

Annex 12: Persistent Toxic Substances

- **General Principles**
 - **Regulatory strategies**
 - **Rehabilitation of areas adversely affected by PTS**

- **Programs**
 - **Inventory and recommendations**
 - **Coordination between air, water and solid waste**
 - **Joint disposal programs**

Annex 12: Persistent Toxic Substances (cont...)

- **Monitoring**
 - **Temporal and spatial trends in PTS**
 - **Sources of input of PTS**
 - **Presence of previously unidentified PTS**

- **Early Warning System**
 - **Structure-activity correlations**
 - **Compilation and review of trends**
 - **Monitoring chemical residues in environment**
 - **Mathematical models to predict consequences**
 - **Information database**
 - **Data to evaluate loadings**

- **Reporting**

Annex 14: Contaminated Sediment

- Information Exchange
- Technology Programs
 - Evaluate existing technologies
- Reporting

GLBTS has discussed possible future directions for the Strategy...

- **Finishing the Job – continuing to work towards the virtual elimination of existing GLBTS Level 1 Substances and P2 actions for Level 2 Substances**
- **Exploring the need for a Framework to identify and address new and emerging chemical threats to the Great Lakes ecosystem**
- **Exploring the role for GLBTS in information dissemination**
- **Increasing international outreach and coordination**