

**Great Lakes
Binational Toxics Strategy
Integration Workgroup Meeting**

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Windsor, Ontario**

Draft GLBTS Management Assessment for Hexachlorobenzene (HCB)

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HCB Challenge Goals

Canada

- Seek a 90% reduction in releases*
- By 2000

* Consistent with 1994 COA

United States

- Seek reductions in releases that are within, or have the potential to enter, the Great Lakes Basin
- By 2006

Progress Toward The Challenge Goals

- **Both Canada and the U.S. have achieved reductions**
- **The U.S. has satisfied its commitment**
 - ◆ **U.S. releases reduced from 8,055 lbs in 1990 to 2,911 lbs in 1999**
 - ◆ **Differences in 1990 and 1999 inventories complicate determination of exact reduction**
- **Canada continues to pursue goal, but it is unlikely that 90% reduction goal will be met by 2006**
 - ◆ **Ontario releases reduced by ~ 62%, relative to 1988**
 - ◆ **Total HCB releases in Ontario are currently estimated at 20 kg/yr**

Environmental Analysis Conclusions

- **Declining HCB concentrations in various media (herring gull eggs, water, sediment, air) to levels not associated with adverse environmental impacts**
- **No fish advisories due to HCB levels in the Great Lakes**
- **HCB levels below detection in fish tissue and human serum**
- **Evidence of continued HCB releases in recent years, due to current sources, historical sources, and/or long-range transport**

Sources: Ontario Inventory

- Pesticide Application (49%)
- Open Burning – Residential Household Waste (19%)
- Use of Contaminated Byproducts (7%)
- Remaining releases comprise ~ 5 kg/yr (25%)

Source: Environment Canada 2003 Release Update

Sources: United States Inventory

- **Pesticide Application (31%)**
- **Publicly Owned Treatment Works (29%)**
- **Open Burning - Residential, Household Waste (16%)**
- **Plastics Material and Synthetic Resins, and Nonvulcanizable Elastomers (9%)**
- **Industrial Organic Chemicals (6%)**
- **Chemicals and Chemical Preparations (4%)**

Source: US EPA 1999 National Emissions Inventory, updated with 1999 pesticide application emissions data

Ability for the GLBTS to Affect Further Reductions

- **GLBTS HCB Workgroup opportunities:**
 - ◆ **Continue to refine inventory estimates (e.g., from pesticide application, POTWs)**
 - ◆ **Encourage emission reductions from pesticide application and chemical manufacturing**
 - ◆ **Support other actions which impact HCB releases (e.g., Burn Barrel Subgroup)**

Ability for the GLBTS to Affect Further Reductions

- Other GLBTS opportunities:
 - ◆ Continue to assess the impact of long-range transport of HCB and its impact on the basin
 - ◆ Continue to support the remediation of priority sites in the basin containing HCB-contaminated sediments, and verify the adequacy of the remediation efforts in eliminating future releases from these historic sources

Management Outcomes

- **Continue coordination with the CEC Sound Management of Chemicals Program & Stockholm Convention**
- **Keep current challenge goals**
 - ◆ **Setting new challenge goals provides no added benefit**
- **Active Level 1 status with periodic reassessment by the GLBTS**