

Management Assessment: Octachlorostyrene

Work Group Co-Chairs:

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Challenge and Progress

- **Challenge: affirm no use of OCS**
- **Challenge: affirm no release from sources that reach the Great Lakes. If ongoing, long range sources outside Canada/US are confirmed, work within international frameworks to reduce releases.**
- **Definition: OCS is a perchlorinated aromatic hydrocarbon that has been a trace byproduct owing to the combining of carbon, chlorine, and energy under formative conditions**

Great Lakes Contexts

- Based on available evidence, there has been a massive decline in OCS abundance across the Great Lakes since the 1960s. This decline seems ongoing, according to latest data.
- Health Canada has assessed exposures to the population of Ontario, reporting 25 to 100-fold safety margins, under precautionary risk estimates.

GLBTS Accomplishment Highlights

- **Substance nominated by IJC**
- **Four step US/Canada informational forum including Stakeholders**
- **Stakeholder workgroup (active 1998-2000)**
- **Step 3 report (9/00): OCS in the environment, potential sources, ideas for prevention**
- **EC/Quebec/EPA/Utah/industry workshop re electrolytic magnesium production (12/00)**
- **EPA's TRI (2002): 5 reporting facilities, 808 pounds, located out of watershed**

OCS in historical perspective

- **Found in Netherlands (1969). Identified (1973)**
- **Electrolytic magnesium factory, Norway (1977)**
- **Relatively abundant L. Ontario**
- **Sarnia, Ashtabula, Niagara Falls sources (1981)**
- **Chlor-alkali w/graphite anodes (1984)**
- **Sediment cores show peak abundance in L. Ontario during 1960s, massive decline since**
- **Gull and fish trends**
- **Decline may be explained by steps to prevent other chlorinated byproducts**

Taking Stock

- Management review report (9/04): review of goals, progress, additional opportunities.
- More comments welcome
- No known exceedance of a health standard.
- Health Canada risk evaluation
- Strong decline, ongoing
- Potential co-formation with HCB and TCDD. Separate OCS process and goal seem redundant.

Management Outcomes

- **No known grounds for geographically broad-based pollution prevention actions specific to the GLBTS are warranted**
- **Rely on Dioxin/Furan and HCB/B(a)P Workgroups to address trace chlorinated hydrocarbons**
- **Continue to regularly review OCS in environmental biota and media through monitoring programs and long range transport studies**
- **If additional sources of OCS are identified, address through appropriate forum or program**