

5.0 OCS Workgroup

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Progress Towards

Challenge Goals

United States Challenge: “Confirm by 1998 that there is no longer use or release from sources that enter the Great Lakes Basin...of the industrial byproduct/contaminant octachlorostyrene.”

Canadian Challenge: “Report by 1997, that there is no longer use, generation or release from Ontario sources that enter the Great Lakes... of the industrial byproduct/contaminant octachlorostyrene.”

The United States commitment under the GLBTS was to review whether there are ongoing releases of octachlorostyrene (OCS), which enter the Great Lakes watershed. In September 2000, this review concluded that OCS releases have been virtually eliminated from entering the Great Lakes. Yet, based on process engineering information, it seems likely that there is ongoing generation of OCS and other chlorinated hydrocarbon by-products elsewhere within the United States. However, such information cannot by itself indicate to what extent generation may in turn result in actual environmental releases.

The Canadian Challenge that there is no longer use, generation or release of OCS entering the Great Lakes Basin from Ontario sources has essentially been met based on available facility release and environmental trend information. Aside from no reported facility releases of OCS from the Ontario side of the basin, environmental trend data for water, fish, and sediments are all pointing to a massive OCS decline over the last several decades, and strongly indicate that OCS releases entering the Great Lakes have been virtually eliminated. Although OCS was

not specifically regulated in the past, the downward environmental trend is likely the result of process changes made by the chlor-alkali and solvent manufacturing industries in the 1970s, 1980s and early 1990s to reduce other persistent toxics such as dioxin and hexachlorobenzene.

In spite of our current knowledge, chemical reaction mechanisms suggest that OCS sources may still exist in the basin. As dioxin and hexachlorobenzene are formed under similar conditions as octachlorostyrene, their presence is being used as a good indicator of potential OCS sources. In this respect, an Environment Canada stack testing initiative has been underway in an effort to fill GLBTS data gaps, including OCS data gaps, associated with priority sectors. The results of this testing initiative will help determine what future action, if any, is needed on OCS releases in Ontario.

Workgroup Activities and the 4 Step Process

United States

A *Draft Great Lakes Binational Toxics Strategy Octachlorostyrene (OCS) Report: Stage 3* was distributed in September 2000 to workgroup members. In addition, in December 2000, USEPA and Environment Canada convened a meeting of North American magnesium producers to promote sharing of lessons regarding methods for preventing and managing OCS and other chlorinated hydrocarbon wastes.

Canada

In June 2000, Environment Canada updated and made available to interested stakeholders its GLBTS Stage 1 and 2 report *Octachlorostyrene Sources, Regulations and Programs for the Province of*



Ontario 1988, 1998 and 2000. The report concludes that there are no documented OCS releases being reported on the Canadian side of the Great Lakes Basin, but identifies potential sources where testing is required in order to confirm that releases do not exist. Work is now underway with several facilities that have indicated a willingness to become involved in a voluntary Environment Canada air testing initiative to help fill data gaps on releases of GLBTS substances, including OCS.

Lakes Basin since the 1960s, and that this decline is strongly indicating the virtual elimination of current OCS releases to the basin. Other than obtaining additional environmental monitoring data that can be used to assess the need for further action, activities of the OCS Workgroup have been linked to the HCB and/or dioxin reduction efforts.

Next Steps

A major finding of the U.S. Step 3 draft report is that there has been a massive temporal decline in environmental levels of OCS across the Great



Bald Eagle

Photograph courtesy of The Canadian Wildlife Service

