

## HEXACHLOROBUTADIENE

No comments were provided on the **health-related sections** of the CEPA PSL Draft Assessment Report on Hexachlorobutadiene (HCBd).

Comments on the **environmental sections** of the CEPA PSL Draft Assessment Report on Hexachlorobutadiene were provided by the Sarnia-Lambton Environmental Association.

Comments and responses are summarized below by Environment Canada. (All were based on the English version of the report).

Comment	Response
<p>1. Substantial remediation efforts in the past few years have virtually eliminated point sources, resulting in measurable reductions in ambient occurrence.</p> <p>Since 1998, the discharge from the Cole Drain has been virtually eliminated. The industrial landfill that had been the primary source of HCBd to the Cole Drain was completely remediated and decommissioned, and the bed of the Cole Drain itself was remediated and restored in 1998.</p> <p>With the completion of this work, and other industrial remediation projects completed during the 1990s, all potential point sources of HCBd along the industrial waterfront of the St. Clair River have been eliminated.</p>	<p>Some additional information about this remediation work has been obtained by Environment Canada. The draft Assessment Report has been revised to reflect the current situation regarding releases of hexachlorobutadiene from the Cole Drain.</p>
<p>2. Elevated levels of HCBd have been identified in small areas of St. Clair River sediment; however, the statement "...sensitive benthic organisms could experience adverse effects..." (Canada Gazette p 2016, Draft Report p. 7, 19, and 31) is speculative. Recent integrated assessment of the sediment areas (Moran, et al 1997<sup>1</sup>, and 1999<sup>2</sup>) concludes only that "contaminants are stressing the system". The benthic component of this work demonstrates that the benthic community in the contaminated areas is statistically indistinguishable from the reference areas upstream, downstream and across the river from the areas of concern.</p>	<p>The draft Assessment Report presents support for the conclusion that sensitive benthic organisms could be adversely affected by hexachlorobutadiene in sediments of the most contaminated section of the St. Clair River.</p> <p>The benthic community may contain many types of organisms that are not sensitive to hexachlorobutadiene, so the benthic community, as a whole, in the contaminated area may indeed be statistically indistinguishable from the reference areas.</p>

<p>3. Suspended sediment measurements in the St. Clair River have demonstrated a dramatic decline over time, as evidenced in the Chan data referenced in the draft report. Chan's work has continued since the 1989 values reported, and can be obtained from the investigator. Chan's data through early 1999 (unpublished) indicate that concentrations in suspended sediments have declined a further order of magnitude over the past decade. These data also demonstrate the success of the 1996 and 1998 remediation efforts.</p>	<p>The draft Assessment Report indicates that the concentration of hexachlorobutadiene in various compartments of the environment has declined significantly in recent years. The recent study indicates that this encouraging trend is continuing.</p>
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- 1 Moran, T., D. Adams, K. Walker and B. Zajdlik. 1997. Lambton Industrial Society 1994/1995 St. Clair River Sediment Program Defining Spatial Extent and Environmental Conditions. Prepared for the LIS by Pollutech EnviroQuatics Limited, Point Edward, Ontario.
- 2 Moran, T. and B. Zajdlik. 1999. Lambton Industrial Society, St. Clair River Sediment Program, Establishment of a Reference Condition. Prepared for the LIS by Pollutech EnviroQuatics Limited, Point Edward, Ontario.