

Summary of Public Comments received on the Challenge substances TDI (CAS RN 91-08-7, CAS RN 584-84-9 and CAS RN 26471-62-5) Proposed Risk Management Approach document for Batch 1

Comments on the proposed risk management approach for TDI to be addressed as part of the Chemicals Management Plan Challenge were provided by Dow Chemical Canada, the Canadian Environmental Law Association and Chemical Sensitivities Manitoba.

Comment	Response
<p>The Government should completely phase out the use of TDI.</p>	<p>The final screening assessment found that the general population would likely have very low exposure to TDI. However, several subpopulations have been identified in the risk assessment which may have higher exposures, notably people living in the vicinity of industries releasing TDI and people using non-foam consumer products which may release TDI. The Government of Canada will therefore undertake various risk management actions to reduce the exposure of Canadians to TDI. These actions include a restriction on factory emissions, the addition of TDI to the Cosmetic Ingredient Hotlist as well as further investigation of risk management of non-foam consumer products containing TDI.</p>
<p>The Government should establish a process to evaluate the safety of potential substitutes for TDI as part of the risk management.</p>	<p>Available information on alternatives and the status of their evaluation under CEPA 1999 is indicated in the proposed risk management approach document. Additional risk assessment of all potential substitutes for TDI is not currently supported by the final screening assessment of TDI which found a low potential for exposure to the general population. The Chemicals Management Plan does not have the mandate to assess and approve of alternative chemicals and/or processes.</p>
<p>The Government should provide more detail in the proposed risk management approach including formulation information and details of industrial processes.</p>	<p>Information is collected under section 71 of CEPA 1999 and submitters may request confidentiality of their business information. While this information cannot be presented in publications, it is considered in the risk management process.</p>

<p>If risk management for consumer products is proposed, the following should be considered:</p> <ul style="list-style-type: none"> a) collection and analysis of data on the TDI levels in non-foam consumer products b) a guideline under CEPA 1999, a general product regulation and/or a TDI specific regulation c) justification and opportunity for further dialogue 	<p>The final risk assessment document supports the further investigation of the need for risk management of non-foam consumer products containing TDI. All available data on the levels of TDI in products was collected, analyzed and included in the screening assessment. The generation of additional data (e.g., laboratory testing of non-foam consumer products) will be considered along with various risk management tool options. There will be further opportunities for comment and consultation on the proposed risk management instruments.</p>
<p>The Government should prohibit TDI from food packaging materials.</p>	<p>The screening assessment found that food is not a major source of exposure to TDI and therefore food packaging was not a primary focus of the risk management. However, Health Canada is continuing to investigate food packaging as a potential source of exposure. Future submissions for the use of TDI in food packaging materials will be scrutinised by Health Canada so that residual levels of TDI in the finished materials remain as low as possible or there is a functional barrier between the packaging material and the food. A functional barrier will prevent contact between the packaging and the food and therefore prevent any potential migration of TDI into the food.</p>
<p>In subsection 9.1.1 Plastics and Plasticizers Sector, two sets of emissions criteria are presented. Modelled data from the risk assessment suggests an emission of 1400 kg/yr results in a 1.06 $\mu\text{g}/\text{m}^3$ “ambient” concentration. Then a study reported from Allport et al. (2003) presents 20 $\mu\text{g}/\text{m}^3$ and suggests this corresponds to a 10 kg annual emission. It is not clear how this two results correlate; on the surface they would not seem to be compatible values.</p>	<p>One scenario suggests that 10 kg are emitted annually, a concentration of $<20\mu\text{g}/\text{m}^3$ would be found in the stack exhaust and non-detectable levels would be expected in the vicinity of the plant. The other scenario suggests that 1400 kg are emitted annually, a concentration in stack exhaust was not presented, but levels of approximately 1 $\mu\text{g}/\text{m}^3$ were estimated in the vicinity of the plant.</p>
<p>The preferred approach for TDI abatement should be a well structured Pollution Prevention plan.</p>	<p>Further information from industry and a technical study suggested that fugitive emissions of TDI are potentially significant and would not be addressed by an air stack</p>

	<p>exhaust limit. Furthermore, foam manufacturing involves different production processes with sources and quantities of TDI emissions that vary throughout the process. These considerations led us to conclude that a stack release limit would not adequately address all sources and that a well structured Pollution Prevention (P2) Planning Notice is a more appropriate risk management instrument for TDI at this time.</p>
<p>Recommend that the existing provincial limits be considered.</p>	<p>In the Pollution Prevention (P2) Planning Notice, additional factors are to be considered when the estimated or measured facility site boundary levels are above 0.2 µg/m³ in 24 hours which is the same level as the Ontario Point of Impingement (POI) as stated in the Ontario Regulation 419/05, which is the most stringent provincial standard for TDI emission in Canada.</p>
<p>Suggest additional monitoring</p>	<p>For each of the four years that are given to facilities subject to the Pollution Prevention (P2) Planning Notice to develop and implement a plan to reduce their TDI releases, the facilities are required to report either the TDI concentration at or beyond the fence line or the results of TDI measurement in stacks, measurement or estimation of TDI from storage tanks, and estimation or measurement of fugitive emissions.</p>