

December 9, 2016

The Honourable Deborah Schulte, M.P.
Chair, Standing Committee on Environment and Sustainable Development
House of Commons
Ottawa, ON K1A 0A6
By Email: ENVI@parl.gc.ca

**Re: Canadian Environmental Protection Act (CEPA) Review
Controlling Toxic Substance**

Dear Ms Schulte:

On behalf of Prevent Cancer Now and Chemical Sensitivities Manitoba, we thank you for consideration of these specific comments to the Standing Committee on Environment and Sustainable Development regarding the *Canadian Environmental Protection Act* (CEPA).

We take this opportunity to address the Committee's interest in hazard versus risk based approaches to chemical assessment and approval. Pitfalls of the risk-based approach are vividly illustrated by the case of organic flame retardants (OFRs). We submitted the attached comments regarding OFCs to Environment and Climate Change Canada (ECCC), Chemicals Management Division, on December 1, 2016, in response to the draft screening assessments, state of science reports and risk management scope documents on "Certain Organic Flame Retardant Substances", released October 8, 2016, in the *Canada Gazette*, Part 1.

Canadians are routinely being exposed to a succession of substances that are recognized as being hazardous, but that are used in insufficient quantities to trigger action. For each toxicant in turn, years pass while usage and associated contamination build up in the environment, homes, foods and us – including the foetus. Eventually, the chemical that was already established as being hazardous is deemed "toxic" due to excessive usage levels – a completely predictable situation. At this point, the next hazardous (but then lower-volume) chemical is substituted.

OFRs are insidious as they bioconcentrate, at low levels they interfere with hormone actions (they are endocrine disruptors), and they are persistent. Generations may pass under the pall of these hazardous chemicals.

Under the proposed phase out deca-polybrominated diphenyl ether (deca-PBDE) will join PBDEs with fewer than 10 bromine atoms (tetra-, penta-, etc.) on the list that Canadian manufacturers cannot make or use. There is an exemption, however – the import, distribution, or sale of products or parts or components of products that already contain PBDEs. Lower brominated PBDEs have been listed for elimination under the Stockholm Convention, and deca-DBDE is now proposed for listing.

Incongruously, while the PBDEs with fewer bromine atoms were eliminated from commerce, the higher brominated decaBDE, stayed in commerce. DecaBDE breaks down into banned PBDEs, as was known for years (e.g. Environment Canada's 2006 *Ecological Screening Assessment Report on PBDEs*) and is described in the Government of Canada's 2016 screening assessment of PBDEs. The high potential for analogous behavior of other PBFRs, such as DBDPE, was expressed in the current draft screening assessment (2016). Rather than proposing DBDPE as a possible substitute for decaBDE and other toxic flame retardants, DBDPE should warrant precautionary proscription, possibly pending in-depth assessment. The goal should be to move towards elimination; not continued usage as a probably-unsuitable substitute.

Clearly, a hazard-based approach with best-practices to eliminate the need for flame retardants and informed substitution would best protect the health of the environment and Canadians, by proscribing toxicant releases and exposures.

Flame retardants are ubiquitous in our environment and can be found in virtually every human. They have also been detected in the cord blood of newborn babies. Our exposure to flame retardants is chronic and difficult to circumvent – at work and at home – and will continue long after the substances have been regulated. The proposed risk-based approach will continue to result in excessive exposures to a succession of toxic flame retardants, that are thought by researchers to be affecting the health and development of every North American child, and costing society vast sums of money (billions of dollars a year in the US (Grandjean et al, 2016)).

We would welcome an opportunity in 2017 to appear, to assist the Committee in their understanding of realities and solutions regarding environmental protection from toxic exposures in Canada.

Respectfully submitted by:

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