Endocrine Disruptors Action Group

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c/o Professor Michelle Murphy
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The Honourable Catherine McKenna,
Minister of Environment and Climate Change
107 Catherine Street
Ottawa, Ontario K2P 0P4

Dear Minister McKenna:

We at the Endocrine Disruptors Action Group (EDAction) are writing to express our enthusiasm for and support of the recommendations made in the recent majority report of the Standing Committee on Environment and Sustainable Development (June 2017). EDAction is a research coalition of researchers examining ways to improve Canadian toxics governance of endocrine disrupting chemicals. Our recent report, *Toxic by Design: Eliminating harmful flame retardant chemicals from our bodies, homes, and communities,* which assesses the shortcomings of Canada's governance of flame retardant chemicals, supports many of the recommendations of the Standing Committee. **Like the Standing Committee, our report points to shortcomings of the Canadian Environmental Protection Act that have led to the widespread distribution of harmful flame retardants like PBDEs, which are endocrine disrupting chemicals (EDCs).** These EDCs have become ubiquitous in the bodies of Canadians and have been identified as emergent chemicals of concern in the Great Lakes. Our research demonstrates the urgent need to adopt key recommendations in the Standing Committee report, which we explain in more detail below. This letter conveys our hopes for a bill to be tabled this fall which adopts the Committee's recommendations wholesale in order to provide relief for the major shortcomings of the Canadian Environmental Protection Act.

In the 18 years since the current CEPA was enacted, scientific developments in our understanding of how chemicals affect health has advanced dramatically. In regards to endocrine disruption, these developments have made it clear that current regulatory assumptions based on the notion of "safe thresholds" can no longer withstand scientific scrutiny, and in fact have discriminatory effect, where small doses harm fetuses, children, and women more than others. **We therefore agree very strongly with the Committee's recommendations to re-define "toxic" to encompass endocrine-disruptors (#39) and low-dose exposures (#40), as well as**

the recommendation (#44) that Environment and Climate Change Canada and Health Canada implement measures, thresholds, techniques and reporting requirements specifically addressing endocrine disruptors.

We also agree with the Committee's recommendation that the government reverse the burden of proof for substances of "very high concern" (#41). This is an entirely appropriate and measured response to a long-identified problem associated with the structure of CEPA. Our research found that Canadians were widely exposed to harmful flame retardants during the long wait for CEPA assessments, offering further evidence that there is a need to reverse the burden of proof in such cases. For example, in the most recent national biomonitoring studies on flame retardants in Canada, PBDEs were found in 75% of tested Canadians, aged 20-79. In a 2012 study of PBDEs in breast milk in Winnipeg and Sherbrooke, 92% and 96% percent of samples contained detectable levels.

The Committee's recommendations adopt an environmental justice framing that is essential for Canada to move forward towards sustainability in a way that accommodates core values of equity and justice. As the Committee recommends, and the research in *Toxic by Design* demonstrates, **a revised CEPA needs to ensure that exposures to "vulnerable populations and marginalized communities" are taken into account, including during critical windows of vulnerability in the life cycle when EDCs have the greatest effect, such as for fetuses and in infancy (#43). Risk assessments will be made much more effective by amendments to the law to require the assessment of "aggregate exposures, and cumulative and synergistic effects" of chemicals (#56).** Our report underlines that the problem of cumulative exposures does not only apply to industrial areas with many emission sources. In addition to marginalized populations, people are regularly exposed to multiple endocrine disrupting chemicals from sources such as food, homes, and dust. Chemicals of concern, including EDCs, are embedded in the ordinary materials and objects that populate our everyday lives, including materials used to make our buildings, vehicles, food packaging, furniture, and commonly owned electronics.

The conclusions of our research in *Toxic by Design* also **supports Recommendation #55, which calls for CEPA "to expressly allow information gathering and regulation making to target the design and functioning of products, and to apply to manufacturers, importers or distributors of the products, rather than only to the users of the products."** Canada's shortcomings in regulating PBDE has exclusively focused on the prohibition of the manufacture, use, sale, or import of some PBDEs beginning in 2008. However, PBDEs have never been manufactured in Canada. This regulation prohibits the use and sale of PBDEs as a product of the chemical industry; however, it does not extend the prohibition to the import, distribution, or sale of finished consumer products or parts of components of products that already contain PBDEs. Our report calls for the extension of the prohibition of toxic flame retardants to consumer products and components of consumer products. This recommended amendment to CEPA begins to address the gap created between the current substance-by-substance approach under CEPA and the product-by-product approach of the Consumer Product Safety Act (CCPSA) that fails to adequately address the widespread use of flame retardants in many kinds of everyday products and materials.

Finally, we agree with the Committee that the government should embrace "alternatives assessment" (#57-59) and the use of "safe substitution" tests to ensure that we are achieving our goals in the safest way possible. As *Toxic by Design* demonstrates, the long-standing practice of regulating chemicals one-by-one has triggered a replacement game between regulators and the chemical industry. As one chemical is prohibited, industry inserts a similar chemical in its place, triggering a new round of risk assessment studies and contestations. This process continually delays the possibility of removing flame retardant chemicals from manufactured goods. As alternatives to PBDEs proliferate, exposures to EDCs are not being eliminated. Rather these new substances are structurally similar and become new sources of ubiquitous exposure. Thus, this recommendation is urgently needed to disrupt this cycle of substitution that undermines the purpose of CEPA.

In sum, EDAction's research has identified significant shortcomings in CEPA, many of which are addressed by the recommendations of the Standing Committee. We therefore urge the Minister to table a bill that accepts these recommendations and revises CEPA guided by the state of contemporary research on EDCs.

Sincerely,

Dr. Max Liboiron, Memorial University of Newfoundland
Dr. Michelle Murphy, University of Toronto
Dr. Natasha Myers, York University
Dr. Dayna Nadine Scott, York University
Ms. Reena Shadaan, York University

CC: The Honourable Kirsty Duncan, Minister of Science
The Honourable Navdeep Bains, Minister of Innovation, Science and Economic Development
The Honourable Jane Philpott, Minister of Health
The Honourable Don Davies, Health Critic (NDP)
The Honourable Linda Francis Duncan, Environment and Climate Change Critic (NDP)
The Honourable Brian Masse, Innovation, Science and Economic Development Critic (NDP)
The Honourable Monique Pauzé, Environment and Climate Change Critic (BQ)
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