

March 30, 2020

Hon. Jonathan Wilkinson, P.C., M.P.
Minister of Environment and Climate Change
Environment and Climate Change Canada
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3

Dear Minister Wilkinson:

Re: Addressing toxic substances, Circular Framework and Life Cycle Approach for Plastics: Response to Draft Science Assessment of Plastic Pollution

The Canadian Environmental Law Association (CELA), Health and Environment Justice Support (HEJSupport) and the Citizens' Network on Waste Management are responding to the *Draft Science Assessment of Plastic Pollution* released for public comment on January 31, 2020. We are pleased to see the release of the Draft Science Assessment of Plastic Pollution¹ as it will advance Canada's efforts to address a growing global environmental crisis on plastics as well as position itself well to implement international agreements on plastics.

Our organizations also support the recommendations by environmental nongovernmental organizations (ENGOS) submitted on March 12, 2020 to take regulatory measures on plastic items by 2021 using the Canadian Environmental Protection Act (CEPA). The ENGO recommendations include:

- *items banned by the EU Single Use Plastic Directive EU/2019/904: stirrers; straws; plates (including paper plates with plastic lining); cutlery (forks, knives, spoons and chopsticks); cotton swabs; balloon sticks; oxodegradable plastics and beverage containers that do not have tethered caps and lids;*
 - *bags;*
 - *all forms of polystyrene and polyvinyl chloride (PVC) food and beverage containers; and*
 - *plastic packaging made of mixed materials (i.e., multi-layered plastics).*
- We further recommend the regulation include the following measures to address bottles, cups and lids, which contribute significantly to Canada's plastic pollution problem:*
- *timelines to phase out single-use, individual-portion beverage containers, including cups and lids and plastic bottles, starting with containers not subject to a return deposit; and*
 - *as a transitional measure, set 90 per cent enforceable collection targets for beverage bottles, and require reductions in the use of cups and lids, as the*

¹ Environment and Climate Change Canada and Health Canada. 2020. Draft Science Assessment of Plastic Pollution.

*EU has done.*²

Our organizations offer the following commentary and additional recommendations in response to the Draft Science Assessment of Plastic Pollution.

Scope of the Science Assessment and CEPA Conclusion

The scope of the Draft Science Assessment of Plastic Pollution provides a good overview of the science currently available outlining the extent of plastic pollution. However, the Draft Science Assessment report has not been explicit as to the purpose and conclusion of the assessment. While the evidence presented in the Draft Science Assessment provides the necessary foundation to develop measures addressing plastic pollution, the format of the Science Assessment differs from recent assessments done under CEPA and the Canada's Chemicals Management Plan.

Since 2006, ECCC and HC have relied on the use of screening level risk assessments to assess hazard and exposure of substances under CEPA with exceptions made for a few substances. These assessments provide a conclusion on whether the substances meet the criteria outlined in Section 64 of CEPA. The government completed a Summary Science Report for microbeads. The Summary Science Report on Microbeads included a conclusion regarding section 64 of CEPA. It concluded that:

*Based on the available information, it is recommended that microbeads be considered toxic under subsection 64(a) of the Act. This would enable appropriate preventative measures to be taken to reduce the release of microbeads into the environment. As a precautionary next step, the Government of Canada is proposing to add microbeads to the List of Toxic Substances under the Canadian Environmental Protection Act, 1999.*³

Subsequently, microbeads were added to Schedule 1 of CEPA and regulations followed in 2017.⁴

The Draft Science Assessment of Plastic Pollution should have a similar approach taken on microbeads. Since the government has conducted a science assessment, it should draw a conclusion on the toxicity of plastics under CEPA. If it does not additional explanation should be included. Based on the evidence presented in the Draft Science Assessment of Plastic Pollution, the government should make an explicit conclusion as it pertains to the criteria outlined in Section 64 of CEPA and call for adding plastics to Schedule 1 of CEPA. This conclusion will facilitate the development of regulatory measures and other measures under CEPA.

Recommendation 1:

- **Based on the science evidence presented in the Draft Science Assessment of Plastic Pollution, a conclusion under section 64 of CEPA should be determined. The conclusion should include a listing of plastic to Schedule 1 of CEPA in accordance with the ECCC intention to designate plastic as toxic.**

² ENGO letter to Hon. Jonathan Wilkinson, Minister of Environment and Climate Change, <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2017-111/FullText.html> dated March 12, 2020, Re: Banning non-essential, single-use plastics and moving toward zero plastic waste and plastic pollution prevention.

³ Government of Canada. July 2015. Microbeads – A Science Summary. Accessed at http://www.ec.gc.ca/ese-ees/ADDA4C5F-F397-48D5-AD17-63F989EBD0E5/Microbeads_Science%20Summary_EN.pdf

⁴ Microbeads in Toiletries Regulations, SOR/2017-111, Canadian Environmental Protection Act, 1999. Accessed at <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2017-111/FullText.html>

We further suggest that the Draft Science Assessment of Plastic Pollution reconsider the scope of products that would be considered plastic waste, particularly with the focus on single use plastic products. Substantial gaps exist in this area. For example, conventional feminine hygiene products which are made from up to 90% crude oil-sourced plastic and can contain associated plasticizing chemicals like BPA, BPS, and petrochemical additives, are not explicitly listed in the scope of what is considered single use plastic products. Additional consideration to these products is necessary as these products become waste and may also be released into the environment.

Recommendation 2:

- **Ensure plastic products reviewed in the Draft Science Assessment of Plastic Pollution is expanded to include other products including conventional feminine hygienic products.**

Advancing a circular framework and life cycle approach to plastic products: Concerns associated with toxic substances

The urgency in addressing plastic pollution includes a substantial commitment to strengthening the life cycle approach. In this regard, the use of toxic substances in the manufacture of plastics and the consideration of the impacts of toxic substances, including those substances that are considered persistent organic pollutants or endocrine disrupting substances, throughout the life cycle of the plastic items should be given substantial consideration in the Draft Science Assessment report. Section 8 of the Draft Science Assessment provides a good overview of the current science available associated with the presence of toxic substances in plastics but the analysis does not provide additional data, references or consideration on the impacts of specific toxic substances that may be used in the production of plastics as additives or released into the environment during product use, recycling or disposal. This is particularly problematic as the Draft Scientific Assessment explicitly notes that "...there is potential for environmental or human exposure to these compounds..."⁵ The Draft Scientific Assessment remains incomplete without consideration of specific toxic substances.

Another example where there is limited consideration of the impacts of toxic substances is in the commentary on additives where data gaps have been identified. Again additional consideration should be given to the urgent need for publicly available information on the use of chemicals in plastics, and the exact chemical composition of finished plastics articles. This could be improved by increasing cross-sector access to high-quality chemical hazard assessment data and promoting transparency into chemical ingredient data and their impacts. Mandatory full disclosure of the concentration of Substances of Global Concern in all materials and constituent components of products could be considered in line with a new European Chemicals Agency (ECHA) database on the presence of hazardous chemicals in articles.⁶

Recommendation 3:

- **Expand the consideration of toxic substances used in the production, manufacturing and release of plastic items and plastic waste by including the data associated with these substances to provide a comprehensive understanding on the plastic impacts to the environment and to human health.**

⁵ Environment and Climate Change Canada and Health Canada, 2020. Pg 69.

⁶ <https://echa.europa.eu/-/scip-database-will-improve-transparency-on-hazardous-substances-in-articles>

Additionally, there is an obvious and increasing need for innovation to develop safer materials, and to increase the availability of safer, non-toxic alternatives in the market (e.g. alternatives for SCCPs⁷ and decaBDE⁸). It is often the case that harmful substances are replaced with chemicals of a similar structure and potential for harm^{9,10} so there need to be systems to avoid regrettable chemical substitutions.

The Draft Science Assessment of Plastic Pollution outlines specific research be conducted “to advance the understanding of the impacts of plastic pollution on the environment and human health”. This approach is inadequate to address the problem and minimize the impact of plastic pollution on human health and the environment. The government should develop a substantial strategy to address plastic pollution that would take into account consideration of use of toxic chemicals, their associated hazards and impacts to the environment and health. Such a strategy should include the following recommendation that takes into account the need for an effective life cycle approach and strengthened the circularity of plastics in Canada.

Recommendation 4:

- **Ensure full disclosure and traceability of chemicals in plastics.**
- **Require the exact chemical composition of finished plastics articles, including packages and food packages throughout the supply chain to minimize human exposure to chemicals in plastics.**
- **Encourage industry to ensure cross-sector access to high-quality chemical hazard assessment data and promote transparency into chemical ingredient data and their impacts.**
- **Amend CEPA to require an informed substitution obligation to avoid regrettable substitution, particularly with toxic substances used in plastics products.**
- **Develop a regulation under CEPA that adds restriction on the use of hazardous chemicals in plastic products, including packaging and food packaging, and prevent regrettable substitutions of hazardous substances with chemicals of a similar structure and potential for harm.**
- **For those single-use plastic items that cannot be immediately banned, targets for the reduction and phase out should be setup.**
- **Promote improved separation and collection of plastic waste at source to avoid hazardous streams being mixed with safely recyclable material.**
- **Require full extended producer responsibility with high performance targets supported by strict enforcement of collection and recycling of plastic waste.**
- **Support innovations to ensure controlled and efficient recycling and recovery of plastic waste and a safe circular economy that facilitates the reintegration of the currently discarded materials into the economic cycle, avoids the toxicity of the recycling process and the contamination of new recycled products with toxic substances.**

⁷[http://chm.pops.int/Implementation/Alternatives/AlternativestoPOPs/ChemicalslistedinAnnexA/Shortchainchlorinatedparaffins\(SCCPs\)/tabid/5986/Default.aspx](http://chm.pops.int/Implementation/Alternatives/AlternativestoPOPs/ChemicalslistedinAnnexA/Shortchainchlorinatedparaffins(SCCPs)/tabid/5986/Default.aspx)

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<http://chm.pops.int/Implementation/Alternatives/AlternativestoPOPs/ChemicalslistedinAnnexA/cdecaBDE/tabid/5985/Default.aspx>

⁹ <https://www.sciencedirect.com/science/article/abs/pii/S2352554115300024?via%3Dihub>

¹⁰ <http://www.cprac.org/en/news-archive/general/we-are-surrounded-by-toxic-chemicals-scp/rac-provides-20-case-studies-to-preven>

- **Following the decision of the European Union, Canada should withdraw the recycling exemption under the Stockholm Convention on POPs that allows plastic products containing toxic flame-retardant chemicals called PBDEs, a globally-banned class of chemicals, to be recycled.**
- **Noting that Canada supports the Amendments to Annexes II, VIII and IX on hazardous waste adopted by the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention) at its 14th meeting (Geneva, 29 April to 10 May 2019)^{11,12}, Canada should expedite the completion of the domestic procedures needed to comply with the amendments shortly after they entry into force for all Parties on 24 March 2020.**
- **Noting that Annex VIII¹³ to the Basel Convention is now amended and includes plastic waste, including mixtures of such waste, containing or contaminated with Annex I constituents¹⁴, Canada should proceed with ratification of the Basel Ban Amendment¹⁵, which prohibits developed countries from exporting their hazardous wastes to developing countries.¹⁶**

Thank you for your consideration of our comments. We welcome the opportunity to discuss them with you.

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¹¹ <https://treaties.un.org/doc/Publication/CN/2020/CN.92.2020-Eng.pdf>

¹² <http://www.basel.int/Implementation/Plasticwaste/Decisions/tabid/6069/Default.aspx>

¹³ <http://www.basel.int/Default.aspx?tabid=2387>

¹⁴ <http://www.basel.int/Implementation/Plasticwaste/Decisions/tabid/6069/Default.aspx>

¹⁵ <http://www.basel.int/Implementation/LegalMatters/BanAmendment/Overview/tabid/1484/Default.aspx>

¹⁶ Formally, the Basel Ban will cover all wastes listed in Basel Annex I that possess an Annex III hazardous characteristic. It will also include all wastes listed on [Annex VIII](#) (presumed hazardous waste streams) unless it can be shown that they do not possess an Annex III hazardous characteristic.