



August 30, 2023

Tracey Spack, Director
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351 Boulevard Saint-Joseph
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Via Email: plastiques-plastics@ec.gc.ca

Re: Pollution prevention planning for primary food plastic packaging

Dear Tracey Spack,

These comments are made on behalf of the **Canadian Association of Physicians for the Environment (CAPE)**, **Women's Healthy Environments Network (WHEN)** and **Breast Cancer Action Quebec (BCAQ)** regarding the [Consultation document: Pollution prevention planning notice for primary food plastic packaging](#).

The Canadian Association of Physicians for the Environment (CAPE) is a national physician-led organization working at the intersection of health and environment. CAPE encourages policymakers to adopt a planetary health lens in their decision-making.

Women's Healthy Environments Network is a non-profit charitable organization that teaches the general public, media, and policy makers that environmental health is a key determinant of public health, and has promoted public action for the prevention of environmental health harms since 1994.

Breast Cancer Action Quebec is an intersectional feminist health and environmental health organization whose mission is breast cancer prevention through education and advocacy. We are particularly concerned with toxic exposures that increase breast cancer risk as well as causing other serious harms to human health.

We also endorse the comments submitted by **Environmental Defence**, the **Toronto Environmental Alliance** and the **Plastic Pollution Coalition**, specifically we support the recommendations for strengthening the risk management objectives, timelines and targets.

Pollution prevention planning for primary food plastic packaging

We support the requirement for these plans: the country's biggest – and very profitable – **grocery chains must be held accountable to reduce the pollution caused by single-use plastic food packaging**. The grocery stores must not use the excuse of cost to avoid making necessary changes to their packaging systems for sustainability. They must also acknowledge that plastic packaging can lead to food waste and that there is no blanket reason for requiring single-use plastic packaging to prevent it.¹ We also assert that **this plan should not replace proposed bans nor regulations addressing plastic products**. Furthermore, if these plans are not proving effective in achieving the waste management objectives, the government should proceed with regulation to address the gaps well before 2035.

The grocery chain Plans must prioritize:

- Elimination of packaging altogether where possible (especially for all produce)
- Convenient and efficient systems for reuse/refill of packaging and containers, particularly “prefilled” products in which containers are returned to the retailer by consumers for refilling prior to being put back on the shelf. Is it beneficial to link successful reuse programs like this from other countries here? Even local successes like the glass Milk Jugs with deposits?

Numerous studies confirm that **reuse is the most effective way to reduce waste, water use, greenhouse gas emissions and material use** as long as there is an effective system that ensures containers are reused many times.² Grocery chain Plans must be required to outline how they will ensure reusable packaging will stay in circulation and not only be used a handful of times. This includes setting targets for return of reusable packaging for refilling, which ensures that systems are set up to get containers back. The chains must also be required to report annually

¹ WRAP, *Reducing household food waste and plastic packaging*, 2022: <https://wrap.org.uk/sites/default/files/2022-02/WRAP-Reducing-household-food-waste-and-plastic-packaging-Full-report.pdf> ; Wohner, Bernhard et. al, “Packaging-related food losses and waste: An overview of drivers and issues,” *Sustainability*, 2018: https://circularanalytics.com/fileadmin/user_upload/Packaging-Related-Food-Losses-and-Waste_Bernhard-Wohner_2018.pdf

² Recyc-Québec, *Life cycle assessment of beverage containers*, 2015: <https://www.recyc-quebec.gouv.qc.ca/sites/default/files/documents/acv-contenants-biere-rapport-2015.pdf> ; Coehlo, Patricia Megale et. al, “Sustainability of reusable packaging: Current situation and trends,” *Resources, Conservation & Recycling: X*, 6, 2020: <https://www.sciencedirect.com/science/article/pii/S2590289X20300086#bib0053>; Parametric Lifecycle Assessment of reusable and single-use restaurant food container systems (2023, University of Michigan); Reloop/Zero Waste Europe, *Review of the Environmental Impact of reusable versus single-use packaging*, 2020: https://zerowasteurope.eu/wp-content/uploads/2020/12/zwe_reloop_report_reusable-vs-single-use-packaging-a-review-of-environmental-impact_en.pdf.pdf_v2.pdf

on return rates for refillable packaging and how many times each package is refilled.

Grocery chains must be required and supported to **explore common packaging and return systems for high-volume packaged food products to ensure convenient and effective reuse options** for the products that are sold the most. They must also make reuse/refill options available in all of their stores to ensure widespread accessibility to reuse options for all income levels. When developing reuse/refill options, it will be important to evaluate their facility for lower-income communities where access to major grocery chains may have more hurdles. For example, the necessity of taking public transport, traveling longer distances to the grocery store and having to carry all the groceries means reuse/refill systems need to be thought out with the most vulnerable in mind, including convenient return of refillable containers. Returns can be a major equity issue, so they require targets, be tracked and reported on.

Any **new packaging adopted under a Plan must be free of PFAS, phthalates, bisphenols, fluorinated polymers, brominated flame retardants, chlorinated paraffins, and benzotriazole UV stabilizers**. All of these chemicals pose a threat to human health and the environment and should not be used in packaging.

Grocery chain **reporting must be robust and publicly-accessible** to ensure that people living in Canada are able to review progress on plan implementation and outcomes on an annual basis. Any requests for time extensions or waivers must be made public, as well as the decision on such a request. Further, “non-confidential information” that will be made available to the public must be defined in the broadest possible sense to ensure that the public has the ability to assess progress on the plans. A lack of transparency would result in a loss of credibility for the Plans.

Business-to-business packaging should also be subject to reporting requirements, given the lack of reliable data on business packaging, on how much single-use packaging they receive from other businesses and any measures taken to eliminate this packaging. This data should be used to identify regulatory and policy tools to eliminate single-use packaging from grocery supply chains as well as possibilities for introducing reusable business-to-business packaging systems.

The Plans must not deter the government from **proceeding as soon as possible to ban harmful and unnecessary single-use plastics**, including all takeout containers, bags other than checkout bags, produce stickers, polystyrene and polyvinyl chloride packaging, and films and pouches. Where the plans do not prove effective at further reducing plastic packaging waste, the

government should ban additional single-use plastic packaging prior to 2030.

Interim target dates proposed in the consultation document – 2026, 2028 and 2030 – should be accompanied by a public report from Environment and Climate Change Canada **assessing the impact of Plan implementation on elimination of plastic packaging waste and pollution**. If the assessments show limited results, regulation – including additional bans on harmful single-use plastic packaging – must be implemented.

Public Health and Food Safety Considerations

In alignment with and endorsement of **OPHA** and other **public health organizations'** comments on the Consultation Document, we submit the following comments in relation to public health and safety considerations:

Recognizing that packaging is a necessary food safety measure for some food items for protection from biological/chemical/physical contamination, **plastic food packaging is also a food safety concern, as the packaging itself can be a source of exposure to harmful chemicals** including polyfluoroalkyl substances (PFAS), phthalates and BPA. As noted in Government of Canada assessments and reports, humans can be exposed to PFAS from various sources including food and food packaging,³ BPA can be found in a range of products including plastic food storage containers and certain food packaging materials,⁴ and phthalates may be used in some food packaging materials.⁵

We urge the Government to take more proactive steps to require food manufacturers and retailers to demonstrate that food packaging material is acceptable from a food safety perspective.

We recognize and support the requirements for all food packaging materials to comply with the safety provisions of the Food and Drugs Act and Regulations,⁶ including Division 23 which prohibits the sale of food in a package that could transfer a chemical to the food that may be harmful to the health of the consumer.

We note in the Government's State of PFAS Report that the responsibility to ensure compliance with Division 23 lies with the food manufacturer, packager, and/or distributor, with food

³ Government of Canada. Health Canada. Food Safety. Packaging Material.

<https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/packaging-materials/bisphenol.html>

⁴ Government of Canada. Health Canada. Food Safety. Packaging Material.

<https://www.canada.ca/en/health-canada/services/food-nutrition/food-safety/packaging-materials/bisphenol.html>

⁵ Government of Canada. Phthalates. <https://www.canada.ca/en/health-canada/services/chemicals-product-safety/phthalates.html>

⁶ Food and Drug Regulations (C.R.C., c.870) Division 23 Food Packaging Materials. **B.23.001** No person shall sell any food in a package that may yield to its contents any substance that may be injurious to the health of a consumer of the food.

https://laws-lois.justice.gc.ca/eng/regulations/c.r.c._c._870/page-47.html#h-573968

packaging manufacturers able to “voluntarily seek the opinion of Health Canada regarding the acceptability, from a food safety perspective, of the food packaging materials that they wish to sell to the food industry.”

We urge the Government to take more proactive steps through the P2 Notice for Primary Food Plastic Packaging, or other regulatory mechanisms, to ensure that Canada’s largest grocery retailers are in compliance with Division 23 of the Food and Drugs Act and Regulations. This should go beyond the voluntary action mentioned above, to requirements for the food retailers to demonstrate to Health Canada, and the public, that the food packaging material is acceptable from a food safety perspective.

We recommend that the Government consider measures to ensure that P2 Plans do not increase health and social inequities such as increased food costs and implications from an environmental justice perspective of requiring P2 Plans only for the large grocery chains. For example, evidence may suggest that persons on low income may be more likely to purchase food at discount retailers rather than one of the large grocery chains.

Additional Context and Considerations

As organizations that approach environmental issues through a lens of the interconnectedness of things – sometimes referred to as a planetary health⁷ approach - we recognize the importance of connecting the dots between the consideration of grocery store plans for plastic food packaging with **climate change, human health and environmental justice**. Furthermore, a solutions orientation towards the challenges of the current Anthropocene era guides our calls to action. The following evidence frames our call for an overall reduction in plastic as **necessary for grocery store Plans to address these intersecting issues**.

Climate Change

The World Health Organization (WHO) asserts climate change is the biggest health threat facing humanity.⁸ From cradle to grave the effects of plastic and the connections to climate change are significant. As such, the relationship between climate change and plastic is important to consider in the development of Pollution Prevention Plans.

Plastic contributes significantly to the climate crisis.⁹ 460 million tonnes of new plastic are made each year and production is rising.¹⁰ Plastics lead to enormous GHG emissions at every

⁷ <https://www.planetaryhealthalliance.org/planetary-health>

⁸ <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health#:~:text=Climate%20change%20%2D%20the%20biggest%20health%20threat%20facing%20humanity&text=Global%20heating%20of%20even%201.5,on%20people's%20lives%20and%20health.>

⁹ <https://www.beyondplastics.org/plastics-and-climate>

¹⁰ <https://www.oecd.org/environment/plastic-pollution-is-growing-relentlessly-as-waste-management-and-recycling-fall-short.htm>

stage of their lifecycle – from extraction and transport of fossil fuels to refining, waste management and leakage into the environment.¹¹ The production, use and disposal of plastics all contribute to climate change.¹² When plastics break apart or are burned, they release carbon dioxide. Single-use plastic waste is a major climate contributor.¹³

The plastics industry is the fastest-growing source of global industrial greenhouse gasses (GHGs).¹⁴ Carbon dioxide accounts for about 76% of total GHG emissions and causes approximately 20% of the global greenhouse effect.¹⁵ GHG emissions from plastic production, use and disposal could be 19 percent of the total global carbon budget by the year 2040.¹⁶ Research suggests that if plastic was a country, it would be the fifth-biggest global greenhouse gas emitter.¹⁷

Plastics are currently part of many systems and products. Food packaging is one among many others such as medical equipment, clothing and furniture, car parts such as tires and lights, children's toys and dishes, and cosmetics. Microplastics enter the environment, waterways, and ultimately, human food systems. Even traffic-heavy roads are a potential source of microplastic emissions.

The resulting high levels of greenhouse gas emissions from plastics through their life cycle are warming the planet. The warmer temperatures increase exposure to toxic substances. The impacts of extreme weather and climate change amplify the release of chemicals into the environment. Climate change exacerbates the human health impacts of air and other pollution sources. Toxic chemicals are thought to hinder the ability to adapt to climate change.

Reductions in plastic products – including in the context of grocery store Pollution Prevention Plans - are a critical part of the overall approaches that are necessary for any effective climate mitigation and adaptation.

Human Health

Toxic chemicals are intimately interconnected with the climate emergency, both in terms of their contribution to climate change and the exacerbation of the impacts of toxic exposures to human and environmental health.¹⁸ Likewise, humans and the environment are suffering from serious adverse health outcomes linked to plastics and their toxic components.

¹¹ <https://www.ciel.org/plasticandclimate/>

¹² <https://www.oecd.org/environment/plastics/Policy-Highlights-Climate-change-and-plastics-pollution-Synergies-between-two-crucial-environmental-challenges.pdf>

¹³ <https://www.thenewlede.org/2023/02/single-use-plastic-waste-is-at-record-levels-with-hefty-climate-toll-report-warns/?s=03>

¹⁴ <https://stories.undp.org/what-do-plastics-have-to-do-with-climate-change#:~:text=The%20plastics%20industry%20is%20actually,global%20carbon%20budget%20by%202040.>

¹⁵ <https://www.c2es.org/content/international-emissions/#:~:text=CO2%20accounts%20for%20about%2076,6%20percent%20to%20global%20emissions.>

¹⁶ <https://stories.undp.org/what-do-plastics-have-to-do-with-climate-change#:~:text=The%20plastics%20industry%20is%20actually,global%20carbon%20budget%20by%202040.>

¹⁷ <https://www.nature.com/articles/s41558-019-0459-z>

¹⁸ <https://healthybuilding.net/blog/533-five-reasons-why-climate-change-and-toxic-chemicals-are-connected>

At every stage of its life cycle, plastic may threaten human health. People are exposed to plastics and their toxic components in many ways, with varying effects and outcomes at different stages of life, from prenatal exposure, to conception to adulthood.

The global costs of **treating plastics-related illnesses and environmental waste clean-up are estimated at CAD 800 billion.**¹⁹

Of the **over 10,000 chemicals used in plastics, over 2,400 of them are of concern including for their carcinogenicity and endocrine disruption potential.**²⁰ Hazardous chemical families including heavy metals, flame retardants, phthalates, bisphenols and endocrine-disrupting chemicals (EDCs) are associated with plastics.²¹²²²³ Exposure to these substances is linked with breast cancer, endometriosis, ovarian cancer, polycystic ovarian syndrome, behavioural disorders, miscarriages, reproductive disorders, abnormal menstruation and more.²⁴²⁵

Microplastic exposure can cause toxicity through oxidative stress, inflammatory lesions, increased uptake or translocation, metabolic disturbances, neurotoxicity, and increased cancer risk in humans, according to research.²⁶²⁷ A recent study found microplastic exposure induces both behavioural changes and alterations in immune markers in liver and brain tissues.²⁸ Health risks related to microplastics are expected to increase. Older microplastic particles are more toxic as they can harbour pathogens and other pollutants including heavy metals.²⁹

Environmental Justice

Women-identifying persons, children, and racialized and Indigenous people disproportionately experience the adverse health outcomes of plastics.³⁰³¹ The toxic chemicals associated with plastic from cradle to grave also **increase the vulnerability of communities to climate change effects.**³²

Sarnia, Ont., is home to one of the largest clusters of manufacturing facilities in the plastics sector and workers and residents in nearby communities, including Aamjiwnaang First Nation,

¹⁹ <https://www.wired.com/story/plastic-pollution-emergency-united-nations/>

²⁰ https://ipen.org/sites/default/files/documents/plastics_carry_chemicals_factsheet_final.pdf

²¹ <https://www.env-health.org/wp-content/uploads/2022/04/Spotlight-on-flame-retardants.pdf>

²² <https://www.env-health.org/wp-content/uploads/2021/01/Spotlight-on-phthalates.pdf>

²³ <https://www.env-health.org/wp-content/uploads/2021/01/Spotlight-on-bisphenols.pdf>

²⁴ <https://pubmed.ncbi.nlm.nih.gov/23164221/>

²⁵ https://www.healthandenvironment.org/uploads/docs/CHEMICAL_EXPOSURES_OF_WOMEN_WORKERS_IN_THE_PLASTICS_INDUSTRY_WITH_PARTICULAR_REFERENCE_TO_BREAST_CANCER_AND_REPRODUCTIVE_HAZARD.pdf

²⁶ <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2018JC014719>

²⁷ <https://www.sciencedirect.com/science/article/abs/pii/S0048969720374039?via%3Dihub>

²⁸ <https://www.uri.edu/news/2023/08/microplastics-infiltrate-all-systems-of-body-cause-behavioral-changes/>

²⁹ <https://www.theguardian.com/lifeandstyle/2023/jul/10/air-drinking-water-dust-food-how-to-reduce-exposure-microplastics>

³⁰ <https://www.unep.org/news-and-stories/press-release/plastic-pollution-environmental-injustice-vulnerable-communities-new>

³¹ <https://www.ubcpres.ca/our-chemical-selves>

³² <https://e360.yale.edu/features/unequal-impact-the-deep-links-between-inequality-and-climate-change>

are negatively impacted in various ways from exposure to toxic gasses, chemical waste and air pollution.³³

The UN Special Rapporteur on Toxics wrote in their 2020 report “There exists a pattern in Canada where marginalized groups, and Indigenous peoples in particular, find themselves on the wrong side of a toxic divide, subject to conditions that would not be acceptable elsewhere in Canada. A natural environment conducive to the highest attainable standard of health is not treated as a right, but unfortunately for many in Canada today an elusive privilege.”³⁴

Western countries including Canada ship plastic waste to other countries, while also exporting human health and environmental harm.³⁵

For environmental justice, action is needed to halt the ubiquitous and disproportionate exposure throughout the cradle-to-grave cycle of plastics by people and communities who are already experiencing injustices and are made vulnerable by social and political influences.

Thank you for the opportunity to provide comments. If you have any questions, please reach out to one of the undersigned.

Sincerely,

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³³ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1281269/>

³⁴ https://www.srtoxics.org/wp-content/uploads/2020/09/Canada-HRC-45_AUV.pdf

³⁵ <https://www.cbc.ca/news/canada/fifth-estate-recycling-1.6410657>