Canada Coalition of Plastic Producers

February 23, 2022

The Honourable Steven Guilbeault, P.C., M.P.
Minister Environment and Climate Change
House of Commons *
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Dear Minister Guilbeault,

Re: Notice of Objection and Request for Board of Review in relation to the Single-Use Plastics Prohibition Regulations*, Canada Gazette*, Part I, Volume 155, Number 52, 2021-12-25

The Canada Coalition of Plastic Producers (the Canada Coalition) is writing to officially submit our **Notice of Objection for a Board of Review** relating to the proposed Single -Use Plastics Prohibition Regulations, permitted under Section 333 of the Canadian Environmental Protection Act.

The Canada Coalition's Notice of Objection outlines its objections in response to **Single-Use Plastics Prohibition Regulations*, Canada Gazette*, Part I, Volume 155, Number 52, 2021-12-25,** proposed by the Ministries of Environment and Health.

Summary of Objections Supporting the Establishment of Board of Review

1. Overarching Use of the Science Assessment of Plastic Pollution Report Contributes to Faulty Regulatory Impact Analysis Statement (RIAS) Conclusions
2. Integrated Management Approach Assessment Tool Fails to Assess Full Life Cycle of Plastics and Alternatives
3. Full Economic Cost Benefit Assessment Required – Jobs & Investment Ignored
4. RIAS –No Rationale for Bans & Increased Environmental Impacts from Alternatives
5. RIAS Negative Impacts on Circular Economy, Reuse and Recycling
6. Provincial Jurisdiction Over Waste Management and Recycling
7. Ban on Manufacturing for Export of SUP's

About The Canada Coalition of Plastic Producers

The Canada Coalition represents companies involved in the manufacture of plastic packaging and resins. Our membership represents the full value chain – resin companies, food service packaging manufactures, single-use and reusable bag manufacturers, and recyclers. Each has extensive experience working to find solutions for their products at end-of-life. Our members are leading companies in the foodservice packaging industry and expert voice on foodservice and plastic packaging in North America.

All members of the Canada Coalition have participated directly or indirectly through associations on the Canadian Council Ministers of Environment (CCME) Strategy on Zero Plastic Waste. We support the important work of the CCME as it uses science and data to avoid unintended environmental, economic and social consequences of bans.

The mission of the Canada Coalition is to represent plastic food packaging products accurately and fairly to the Canadian government, industry and consumers/citizens. The Canada Coalition is committed to advocating on behalf of the plastic food packaging industry, which ensures food and beverage products are supplied to consumers in a sanitary, economically sound, and sustainable manner.

The goals of the coalition are to:

- Further the understanding of the critical role plastic food packaging plays in the Canadian economy;
- Ensure a fair marketplace, which allows plastic products to compete based on performance, costs and end-user needs/desires;
- Promote the circularity of plastics by encouraging proper waste and litter management, recovery efforts, and use of recycled material.

The Canada Coalition is providing the following information to support and assist an independent Board of Review to consider in its review the proposed regulations. The Regulatory Impact Analysis Statement (RIAS) has serious flaws we will highlight below. One of the most serious omissions by the government is a Comprehensive Economic Cost Benefit Analysis that would include jobs, investment and impacts across the whole Canadian economy.

1. Overarching Use of the Science Assessment of Plastic Pollution Report Contributes to Faulty Regulatory Impact Analysis Statement (RIAS) Conclusions

The Canada Coalitions objections to Regulatory Impact Analysis Statement (RIAs) Single-Use Plastics Prohibition Regulations originates from the governments use of incorrect conclusions

and incomplete data that emerged from the Science Assessment of Plastic Pollution (Science Report). This has resulted in "plastic manufactured items" being listed as toxic in the Canadian Environmental Protection Act (CEPA) Schedule 1 Toxics List to give the government powers to ban plastics across Canada. The RIAS for Single-Use Plastics Prohibition Regulations relies on the Science Assessment for its analysis where the government has selectively ignored or used findings presented in the Science Report to support the RIAS conclusions.

- Detailed objections and arguments are found in our Notice of Objection relating to the listing of "plastic manufactured items" in CEPA and the misuse and misrepresentation of the Science Assessment findings by the government.

- We do not support bans because plastics are not toxic. Plastics do not belong in the CEPA Toxic List Schedule #1. Over 2,275 plastic polymers have been approved by Health Canada Safety Branch and the US Health Safety Branch. Under the umbrella of CEPA, the RIAS and proposal to ban plastics are targeting these approved plastics.

2. Integrated Management Approach Assessment Tool Fails to Assess Full Life Cycle of Plastics and Alternatives

The Canada Coalition objects to the RIAS's reliance on a faulty and inadequate assessment tool, "The Integrated management approach to plastic products to prevent waste and pollution" which compounds the faulty conclusions and findings in the RIAS. This tool fails to assess the impact and benefits of plastics full life cycle while conducting absolutely no analysis on the impacts of the alternatives.

The government has minimized and suppressed the full life cycle benefits of plastics to promote the use of alternatives through the omission of a life cycle approach in the Integrated Management Approach assessment tool. This is a serious flaw in the governments approach which promotes in the RIAS alternatives that will not result in improved environmental performance over the banned plastics. The Trucost study Plastics and Sustainability: A Valuation of Environmental Benefits, Costs, and Opportunities for Continuous Improvement found that the environmental cost of using plastics in consumer goods and packaging is nearly four times less than it would be if plastics were replaced with alternative materials.

- The Canada Coalition recommends that the Board of Review examine the shortcomings of the Integrated Management Approach Assessment Tool and its contribution to erroneous assumptions and conclusions.
- Additional comments to support our objections and assertion the RIAS has relied on a flawed and inadequate integrated management assessment tool is found in **Appendix #1**.

3. Full Economic Cost Benefit Assessment Required – Jobs & Investment Ignored

The Canada Coalition objects to the RIAS suggesting there is a positive cost benefit of the governments plastic policies. The RIAS has not completed a full and complete economic cost benefit analysis. The government failed to assess the policy impact on the Canadian economy, by taking a narrow cost benefit review on costs related only to value recovery, environmentally problematic materials and the alternatives to plastics.

The lack of a full economic assessment is compounded by the faulty conclusions and incomplete data from the Science Assessment and Integrated Management Approach has resulted in a cost benefit analysis that is far from economic reality and the truth.

No where in the RIAS is there an assessment of employment and the cascading negative impact on jobs and investment in Canada, an exporting nation that is now signaling to the global economy and our closest trading partner, the United States, it is not open for business and investors need not apply.

The estimates of job loss vary, but evidence of the impact presented at the Standing Committee ENVI, estimated direct loss of 20,000 plastic jobs and 40,000 indirect jobs lost (2 indirect jobs for every direct plastics job) that service the plastics industry (Source CIAC – E. Mantagaris: Evidence - ENVI (43-2) - No. 24 - House of Commons of Canada). And, this is only the beginning as the government has already signalled expanding the bans from the six product categories and a ban on all manufacturing related to these bans for export. Full analysis would have discovered that some machinery used in the manufacturing sector for food and consumer products cannot be converted to manufacture other materials. This will likely cause a shift of these jobs and facilities to jurisdictions outside of Canada that are friendly to manufacturers and where capacity already exists to package products. Canada will be exporting jobs to other countries.

The government acknowledged plastics are a minuscule less than 1% problem through its own report (Economic Study of the Canadian Plastic Industry, Markets and Waste). Less than one percent of all plastics in the economy across all sectors – construction, medical, transportation, packaging, textiles, electronics and other uses currently ends up mismanaged. Most of this plastic leakage flows through unmanaged dumps or leaks which is a waste management problem, not a plastics problem. Mismanaged dumps have solutions to prevent leaks and including diversion of plastics for recovery and recycling. Litter can be addressed through education and enforcement of litter laws as litter is a human behaviour problem.

To put Canada's performance in managing plastics into perspective, Canada ranks a mere #187 per capita out #192 countries, as a contributor of ocean plastics (Jambeck Study - Plastic waste inputs from land into the ocean). China is the #1 polluter on this list.

Canada manages plastics well versus other jurisdictions with only 0.025% of total mismanaged plastic versus China at 27.7%, as evidenced by the Jambeck study. We support continuous improvement and recognize Canada can always do better through provincial collaboration with industry run Extended Producer Responsibility (EPR) programs. Canada's provinces who have responsibility and jurisdiction, through the Canadian Council of Ministers of Environment (CCME) Zero Plastic Waste Strategy are implementing solutions to reach the Oceans Charter goal of zero plastic waste.

The government must conduct a full cost benefit analysis if it cares about domestic jobs and investment. The human impact and cost are estimated to be 60,000 employees (i.e. households) who will lose their jobs and livelihoods. The government's actions will affect over 174,000 men, women and children (Canada average household 2.9 people) to address the miniscule less than 1% of mismanaged plastics resources the government wants to address.

Canada's policies on plastics will not have any measurable positive impact on ocean plastic pollution. The government acknowledged in the RIAS its estimates of 29,000 tonnes has been reduced to 2,663 tonnes. It could not state the volume of plastics that will reach the oceans.

This misguided policy on plastics will have measurable negative impacts on Canadian's health, lifestyle and economy. It will cost Canadians their jobs and $¼ billion in additional costs of using the alternatives to plastics. And, in the end it will bring no environmental benefit. Rather it will be worse for the environment the government says it is trying to protect. This is not a win-win for Canada.

- The Board of Review examine the economic cost benefit analysis in the RIAS, advise on its shortcomings to the government

4. RIAS –No Rationale for Bans & Increased Environmental Impacts from Alternatives

The government has not provided the rationale for banning the six categories of plastic manufactured items. The RIAS examined the upstream impacts of the alternatives and found the negative impacts on climate change, air quality, water quality & quantity and terrestrial environmental quality. The RIAS suggest the negative environmental impacts are minimal, however studies by Trucost Group The Trucost study Plastics and Sustainability: A Valuation of Environmental Benefits, Costs, and Opportunities for Continuous Improvement) found they are more than minimal and 4 x's more than the plastics they replace.

The alternatives due to their greater material intensity and heavier weight would add to the waste and litter streams that are managed, increase the carbon footprint and greenhouse gases to ship products and overall result in a greater consumption of resources.

- The RIAS has not provided the rationale for banning the six categories of plastic manufactured items especially when there are 4 x's greater environmental costs from the alternatives.
- The Board of Review address this lack of rationale with the government

5. RIAS Negative Impacts on Circular Economy, Reuse and Recycling

You cannot ban your way to a Circular Economy. Investment in recycling infrastructure and new advanced recycling technologies to recycle/recover and improve the value recovery of more plastics will seriously question the value of investing in Canada. The uncertainty of the government expanding bans to more plastic manufactured items will affect the local supply of plastic feedstocks collected for recycling which will become a barrier to investment.

Plastic Film Checkout Bags & Reusables

The impact of the RIAS inflated the assumptions around the environmental benefits of reusables. This could not be more evident as in the case of the RIAS's treatment of the proposed ban on "film plastic" checkout bags versus reusable cotton/woven bags. The RIAS buys into the myth that reusable bags are environmentally superior to the film plastic recyclable/reusable plastic checkout bags.

Numerous studies and life cycle assessments found the plastic checkout bag the best environmental option of all bags in the marketplace. They are reusable, recyclable, and the most hygienic bag on the market. They fit into and support the 3R's and Circular Economy. On top of that, they have the lowest carbon footprint of any bag. A number of government scientific Life Cycle Assessments (LCAs) prove that plastic shopping bags have a much lower carbon footprint and the lowest global warming potential of any carry bag on the market (Sources: Bag Life Cycle Assessments).

The three most recent studies have been done by the United Kingdom, the Government of Denmark, and the Government of Quebec (Canada), and they all reached the same conclusion that plastic shopping bags have the lowest environmental impact. They all found that plastic shopping bags are not single-use, but multi-purpose, multi-use bags with very high reuse and recycling rates for those bags not reused. The Quebec study found the reuse of "single-use" plastic shopping bags was 77% and as high as 91% in Manitoba. Combined reuse and recycling rates for plastic checkout bags is as high as 91%.

All bags have environmental impacts, so it depends on the type of bag, how it is used, and most importantly, how often it is used. Scientific study after scientific study shows that conventional plastic shopping bags are the best bag alternatives for the environment, particularly if reused more than once.

The most important points are:

1. **Reusables are not recycled because it is too expensive** so they eventually will end up in landfill thrown out as waste. As multi-material bags, they must be disassembled into the different materials that make up the bag.
2. **Reusables can pose a public health risk as we discovered during COVID because users do not clean their bags regularly.** A vast majority of users rarely clean their bags and they can become incubators and transmitters of various types of viruses, bacteria, mold and fungi.
3. **Reusables are not reused enough by users even though they are built to last for 125 reuses.** A US study found that reusable bags are reused on average only about 15 times.

On a life cycle basis, stronger heavier, bags made to last longer – no matter what material they are made from – will have a greater environmental impact because they use more resources in their production, produce more carbon and other greenhouse gases.

The Canada Coalition objects to the sweeping assertion that plastic film is being banned due to negative value recovery and problematic environmental designations. The plastic film ban for checkout bags kills the 100 Reuse/Recyclable Plastic Film Bag innovation that will contain up to 40% or more postconsumer plastic film. This reusable plastic film bag innovation supports Canada's move to a Circular Economy. The current reusable bag alternatives promoted by the government in the RIAS do not meet Circular Economy goals as they will end up at end-of-life in the landfill and have a greater environmental burden.

- Recommend the Board of Review examine why the RIAS did not examine the environmental impacts of all types of checkout bags and alternatives.

Plastic film is 100% recyclable and plastic film collection and recycling technologies are established with markets growing for this material. New developments in collection, processing, recycling and market development for flexible plastic packaging were demonstrated in Materials Recovery For The Future (MRFF) pilot program in Birdsboro, Pennsylvania. These developments have not been accounted for due the Integrated Management Approach Assessment Tool not being dynamic to include new innovations and growth in value recovery that will keep plastic film and flexible packaging in the marketplace and out of landfills and the environment.

- The Board of Review examine the RIAS and role of Integrated Management Approach Tool assessment of value recovery which is not dynamic, does not account for innovation and new collection, processing and market developments.

With regards to litter, plastic film bags are well managed within the 3R's. Plastic shopping bags are tiny portion of the waste stream, so it makes sense that municipal litter audits conducted over the past 20 years all across North America show that plastic shopping bags are a tiny part of litter at less than 1%; 0.4% on average.

Bags are such a small component of litter that a ban on bags will have no impact on litter reduction. North American Municipal Litter Studies – 102,951 litter observations show Plastic Bags only on average 0.4% of Litter. These studies completed in 44 municipalities were scientifically implemented dealing with bags and litter generated in the municipality. The litter and ocean shoreline cleanups do not identify or determine where littered items were generated from. Considering Canada's contribution to ocean plastic litter was found to be less than 1% (estimates by the RIAS of 2,663 tonnes or .03% of global plastics litter) and it is documented that 10 Rivers in Asia and Africa contributed almost 90% of ocean plastics pollution, the use of unscientific Canadian shoreline cleanups which have no source of generation data is suspect and overstates plastic bag litter.

- The Board of Review examine the veracity of the Canadian shoreline litter and generation data used to deem Canadian plastic film bags as problematic.
- The Board of Review examine the role of the Integrated Management Approach assessment of plastic film bags being designated a problematic material and challenged on value recovery.
- It is recommended the "film plastic" designation from the definition of banned checkout bags be dropped as the RIAS provides no rationale for this broad designation that prevents the manufacture and distribution of plastic film 100 Reuse/Recyclable checkout bags.
- The government consider innovation funding for bag manufacturers switching their bag production to the 100 Reuse Bag.

Polystyrene Foam Foodservice Packaging

Polystyrene foam (PS foam) can be either expanded polystyrene (EPS) or extruded polystyrene foam (XPS). Applications range from cups, clamshells, plates and other foodservice packaging. Its environmental benefits result from the material being on average 95% air reducing material intensity and its carbon footprint.

The Canada Coalition objects to PS foam being classified as environmentally problematic and not having available value recovery options by the Integrated Management Approach assessment tool. The shortcoming of the tool is it is not dynamic, does not account for innovations in new recycling technologies and collection systems through industry EPR programs to collect and recycle PS foam.

In the case of PS foam, its collection has been hindered over the years by the lack of collection curbside, depot or return programs. Provinces are now implementing, as part of the CCME Zero Plastic Waste Strategy, industry led EPR programs that will enhance the collection of PS foam. This is a positive development for collecting and recycling more PS foam packaging. Federal government intervention into provincial programs and jurisdiction is not required.

In the case of clean PS foam, it is easily recycled in mechanical recycling processes to make new PS products such as picture frames and architectural products. New innovations on Mechanical PS foam recycling will be able to manage post-consumer PS foam foodservice facilitating its use in food contact applications, therefore increasing end-markets for recycled PS foam.

New developments in advanced PS foam recycling using advanced recycling (depolymerization)technology are commercialized and is recycling post-consumer PS foam. The recycled product is a styrene oil monomer that can be manufactured into food packaging and a multitude of products, making PS foam one of the most circular materials in the economy. Companies using this technology in Canada and North America include Green Mantra, Pyrowave, Polystyvert, Ineos Styrolution, Agilyx and AMSTY.

- Recommend the Board of Review assess PS foams classification as environmentally problematic and not having available value recovery options by the Integrated Management Approach assessment tool which has not recognized new developments in collection, processing, recycling and market developments
- The government consider an innovation fund for advanced recycling technologies and new sorting and processing technology at Material Recycling Facilities

Black Plastics

It has been suggested by some parties and the Integrated Management Approach that it is not possible to sort black plastics in a Materials Recovery Facility (MRF). The fact that the plastics are black is not a limiting factor in being able to recycle the material. Black plastics are valuable and desired by end markets. In reality, there are now a number of manufacturers in the marketplace that provide optical sorting technology for the management of black plastics.

There are optical sort technologies capable of detecting black and dark plastics and the availability of this equipment is growing (Source: CPIA Emerging Technologies for the Management of Black Plastics Technical Report 15 May 2018).

The Canada Coalition objects to the ban on black plastics as recyclers, such as Merlin Plastics and Revital Polymers, have developed markets for the black recycled plastics that are created when coloured, black and dark plastics are recycled. The RIAS and government plan to ban black plastic will harm the Circularity of coloured plastics which is counter to societal goals of increasing the Circularity of plastics.

- The Board of Review assess the unintended impacts the black plastics ban will have on the Circularity of coloured and dark plastics.
- The Board of Review is alerted to the flaws and shortcomings of the Integrated Management Approach to be dynamic and responsive to innovations, technologies and developments that will recover and recycle plastic resources.

Straws and Compostability

The proposed regulations and RIAS provide a number of exemptions for health and disability issues and bendable straws. It is unclear and the regulation is silent on compostability and biodegradability in the proposed regulations. The RIAS however mentions in the analysis that the proposed Regulations "would treat single-use items made from non-conventional plastics in the same manner as their conventional plastics counterparts".

We find the inclusion of compostable plastics to be counterproductive to industry innovation that is available in compostable biobased straws that has a lower carbon footprint than the paper and conventional plastic straws (Stone Straw LCA), certified to compost and degrade in marine environments with no hazards or toxins to the biota. Any concerns about value recovery by compost operators and confusion from consumers between plastic and compostable straws will be resolved with the manufacturing of conventional plastic straws ceasing with the ban.

Recommendation

- The government not treat the compostable straw in the same manner as the conventional plastic straw as concerns for confusion of compostable vs conventional straws will be resolved through the conventional plastic straw ban that will leave only compostable straws in the marketplace
- The government consider innovation funding for straw manufacturers moving away from conventional plastic straws.
- The government should examine and the health and safety of paper straws that may contain carcinogenic strengthening agents

6. Provincial Jurisdiction Over Waste Management and Recycling

The Provinces under Canada's Constitution have responsibility for waste and recycling resources and their management. This includes implementing EPR programs funded and operated by industry. Provinces are best positioned locally to manage these programs and are implementing the CCME Zero Plastic Waste Strategy through their collaboration with industry and Federal Government.

For example, the Province of Ontario is implementing a full 100% industry funded and operated Blue Box Recycling Program that will collect many of the Single Use Plastics the Federal Government proposes to ban. Ontario is also modernizing its environmental approval processes to reduce red tape on implementing advanced recycling technologies. With these policy changes, Ontario is planning to be a leading jurisdiction in resource recovery and recycling. The Federal bans interfere and conflict with Ontario's plans and jurisdiction over its waste management programs.

Minister of Energy Savage from Alberta announced at the Standing Committee ENVI that five provinces (Ontario, Alberta, Saskatchewan, Manitoba and Quebec) signed a joint letter opposing the Federal Governments overreach on their jurisdiction and designating plastic toxic in CEPA. This was a clear message for the Federal Government to stay out of local provincial waste management plans.

Recommendations

- The Federal Government recognize the Provinces jurisdictional responsibilities and not interfere with their local plans to implement EPR programs and their plans to collect the banned single use plastics.
- The RIAS is inaccurate (Table 4) in saying only 1 province opposed, it was 5 and supported by a joint letter to the Minister of Environment.

7. Ban on Manufacturing for Export of SUP's

This was discussed in the consultations with the Proposed Regulation exempting exports and imports for export. Recent meetings and webinars with ECCC have raised the prospect that the government leaders may remove this exemption making it illegal to manufacture the banned plastic items for export. If the government proceeds with this plan, it will immediately shut down companies in the banned sectors resulting in 60,000 lost jobs, lost investment and the export of Canadian jobs to foreign jurisdictions. The fallout from the change in this exemption is serious and catastrophic for these workers, companies and national economy.

These companies cannot pivot to new products in a very competitive global economy as their equipment and assets are purpose built for the banned products. The timelines to install new equipment and train staff does not exist for most companies. The uncertainty created by a manufacturing ban for exports will have a chilling effect and cascade through the Canadian plastics economy resulting in reduced and no investment in Canada.

Recommendations

- The government not proceed with removing the export exemption
- A full and comprehensive economic cost benefit analysis recommended in earlier comments be assessed for impacts of lost jobs, lost investment & stranded assets and the impact on local, provincial and federal revenues and taxes.

Conclusion

Plastics has been acknowledged by the governments to play an essential role in our healthy lifestyle and protection of the environment and economy. Government leaders have continuously reminded Canadians that they are committed to abide by the key foundations of good public policy development through science, fact-based analysis and collaboration with affected stakeholders. This is a complex issue with no easy answers. We believe that any decision related to the environment and economy must be based on science and fact and look at the intended and unintended consequences of that decision.

Based on our examination of the RIAS, it has not proven environmental harms will be reduced by the Proposed Regulations due to lack of science and data to support the RIAS analysis and conclusions. In fact, the RIAS found increased environmental harm not less and greater economic costs with zero benefit to Canadians. The RIAS could not answer a full economic cost benefit analysis as it failed to include job and investment losses and the cascading impact of the plastic bans and CEPA toxic designation on other manufacturing sectors of the economy.

The Canada Coalition recommends that an independent Board of Review of non-governmental experts (a diverse stakeholder group that would include academia and industry) review and assess the RIAS recommendations, conclusions and proposed regulations.

We believe as drafted, the Proposed Regulations will introduce negative unintended environmental, economic and social consequence on Canada with no additional benefits and at a greater cost to Canada and its sustainability goals.

Our industry continues to support the CCME's approach to implement the Zero Plastic Waste Strategy. Its development was a collaborative approach between federal, provincial, municipal, industry and other stakeholders to determine how to best manage plastic waste in the environment and maintain and improve plastics benefits in the Canadian economy.

Sincerely,

Joseph P. Hruska
Canada Coalition of Plastic Producers

Appendix #1
Management Approach Review –Alternative Application & Improvements to the Approach

The Management Approach is a direct result of the governments narrow focus to use the expediency of CEPA to manage plastics by declaring plastics toxic in CEPA Schedule 1. The Science Assessment does not support or provide evidence on toxicity. The mismanaged plastics issue is a less than 1% waste management challenge that should be addressed through more appropriate instruments such as Extended Producer Responsibility (EPR) and the CCME Zero Plastic Waste Strategy implemented at the provincial level to meet local economic, environmental and social needs. A made in Ottawa CEPA approach one size fits all, will not be sensitive to local needs on many levels and should allow for the continued success and roll-out and expansion of EPR programs by the provinces.

With that perspective, we believe the government should withdraw its plan to utilize CEPA to manage plastics based on the overwhelming evidence that plastics are not toxic.

However, we believe the Management Approach does has value with improvements to make it truly integrated and holistic to assess all products so that they can be continuously improved to meet economic, environmental and social goals.

The ECCC Management Approach should be utilized to provide guidance and direction on "additional waste management needs" to improve environmental goals and objectives and not used to implement policy decisions such as bans.

Recommended Improvements Needed for The Management Approach to Be a Value-Added Guidance Tool

1. **Integrated & Holistic Approach**
   The current approach needs to be more integrated and holistic to assess plastics and all alternatives to truly drive continuous improvement in environmental outcomes. Currently the approach is narrowly focused on plastics with no assessment of alternatives which may or may not provide improved environmental performance with regards to carbon footprint, energy use, greenhouse gas potential, water and air emissions and other key criteria.
2. **Categorization Criteria – Environmental & Value Recovery Problematic**
   The Management Approach tool only examines the "plastic manufactured items" through the narrow lens of Circular Economy (CE) which does not address full lifecycle impacts and other critical factors that a complimentary approach such as Sustainable

Material Management (SMM) would provide. The government while promoting CE is in actuality stifling it through its bans.

Data, considerations and tools that should be included in the ECCC Management Approach to inform good guidance and policy direction are:

- **Source Reduction:**
  - SSM would inform material efficiency over reuse, versus CE re-use over efficiency. Trade-offs in order to identify best ways to reduce overall material and resource demand. The integrated Management Approach through its narrow use of CE principles prefers material reuse over efficiency (Ameripen - Maximizing the Benefits of Circular Economy and Sustainable Materials Management Models For Product-Packaging Systems), leading to increased negative environmental and economic outcomes (Trucost - Plastics and Sustainability: A Valuation of Environmental Benefits, Costs and Opportunities for Continuous Improvement)
- **Quality:**
  - SSM would examine the need for virgin material as needed and degradation of quality to ascertain best value. CE focus does not address quality by only seeking to avoid feeding virgin material back into system.
- **End Markets:**
  - SSM evaluates flow of materials between processes and across geographies. Includes evaluation of disruptions to, or lack of, end markets. CE Infers local and assumes markets will grow with demand.
- **Life Cycle Assessment (LCA) Data & Tools:**
  - The lack of any data and use of LCA tools is a critical and severe omission from the integrated Management Approach. The alternatives the ECCC is examining have not been assessed in terms of the full lifecycle impacts and the negative unintended impacts of the proposed bans have not been revealed in the Management Approach.

3. **Economic Costs**
   - The Management Approach must include an economic assessment across the full life cycle of the products (e.g. cost to consumer to end-of -life management). This will inform stakeholders on improvements required to develop more sustainable systems to addressing the cost-of-living consumers face every day to ensuring Canadian businesses are competitive. The cost of alternatives can be 2 – 4 times more expensive than the plastic packaging they are replacing. Those costs include environmental and social costs (Trucost Plastics Study). It is recommended that the Management Approach include a socio-economic review to examine the impacts of any policy decision.
4. **Include Priorities Such as Public Health & Food Safety**

- The Management Approach takes a narrow approach to assessing the value of products and materials in its value recovery definition using a strict adherence to CE.
- For the Management Approach to have value to society, it must be improved by addressing critical public health and food safety issues that have been brought into focus by the pandemic.
- Over the past number of years, public health has increasingly taken a back seat to the environment, reduction, reuse and recycling. Ignored in this discussion have been health risks posed by reusables. If not properly cleaned between uses, reuse can pose serious health risks. Major unions, Canadian retailers, and even governments have moved to suspend bans on single-use items and restrict the use of reusables during the Covid-19 crisis. Considerable research has been done over the last 10 years that show reusables as less sanitary than single-use items. For instance, reusable bags have already been implicated in bacterial and norovirus infection of consumers (International Outbreak Museum). A recent survey in Canada found over 55% of consumers never wash their reusable bags.
- Food safety is critical to our healthy lives. Food packaging materials were developed, engineered and designed to prevent the spread of disease, protect our food supply, extend shelf life, minimize food waste, prevent tampering, keep the cost of food affordable while providing what is typically the best alternative for the environment and economy.

5. Management Approach Needs to Be Dynamic

- The management approach is currently static and does not recognize or address the fast changing, innovative and dynamic marketplace with new products and packaging that bring new benefits to the economy and environment.
- The approaches value recovery recycling threshold set at 22% and identification of current barriers to recycling that may exist, are in themselves a barrier to innovation and establishing a circular economy for materials ECCC categorizes as value problematic. This threshold does not account for the fact that this threshold does not address the current state of infrastructure which varies from province to province and by material.
- Keeping plastics (and other materials) in the economy will require multiple options that involve reduction, reuse, recycling and recovery, advanced technologies and innovations in a fully integrated resource recovery system. The use of the complimentary approaches of CE and SMM would lead to positive overall environmental and economic performance.
- The management approach should include an assessment of a materials current and future potential for value recovery across all recovery options. The approach for example, recommends banning foam products as being environmentally and value recovery problematic. The Management Approach does not recognize that foam polystyrene (EPS) is now being processed commercially in new advanced depolymerization technologies. This infrastructure is expanding and will create for

EPS a perfectly circular economy, with expanded markets across all sectors of the economy.

- If the current definition of value recovery was applied in the early 1990's, PET would have been classed value recovery problematic. However, this has changed with the plastic industry and recyclers developing and investing in new optical sortation technologies, that make PET products one of the most highly recycled and valued resins.