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Chairman Francis Scarpallegia, M.P.  
Standing Committee on Environment and Sustainable Development  
House of Commons  
Ottawa ON K1A 0A6  
Canada  
E-mail: [ENVI@parl.gc.ca](mailto:ENVI@parl.gc.ca)

Dear Chairman Scarpallegia:

**RE: Single-Use Plastics and Plastic Waste**

I am writing to you today on behalf of the Celanese Corporation. Celanese is a cellulose acetate, chemical, and engineered material company with Canadian manufacturing facilities in Edmonton, Alberta and Boucherville, Quebec.

As the committee undertakes a study on single-use plastic and plastic waste, we would like to provide you with information about an innovative material that is derived from responsibly-sourced forest products. We believe that this information is of interest to the Committee as it considers recommendations to the Government of Canada on the elimination of certain single-use plastic materials in Canada. It is our view that our cellulose-based alternatives to single-use plastics are an innovative use of wood and wood products.

As you are well aware, the Minister of the Environment has launched a consultation on the management of plastic waste. A key aspect of the risk management strategy will focus on ensuring that certain 'harmful' single-use plastics are eliminated from commerce. The Minister has indicated his intention to regulate 'plastic manufactured items' by declaring them toxic under the *Canadian Environmental Protection Act*.

We believe plastic is essential to our modern society because it keeps food fresher, insulates our homes, makes our vehicles more fuel-efficient, and are used in life-saving medical devices. We believe that fugitive plastic entering the environment is an important issue that needs to be addressed through waste management. A coordinated approach between the federal and provincial governments to improve waste management in Canada is preferable to product bans which by the government's own admission will address less than 1% of plastic waste. We urge this committee to express its disapproval for the federal government's approach.

That having been said, a vitally important part of the upcoming regulation will be the definition of 'plastic.' The definition of plastic which is used in the promulgated Canadian regulation must **exclude** functionalized natural polymers, like cellulose-based materials. Conventional plastics are typically the results of synthetic polymerization of monomers, whereas functionalized cellulose-based materials use polymers occurring in nature combined with secondary chemistry to impart specific properties.

We request that products manufactured from innovative forest feedstocks are exempted from the proposed ban. The rationale for this is simple – cellulose-based products will not persist in the environment and do not pose an environmental risk because these products safely break down under natural conditions.

Celanese is in the advanced development phase of a new product based on Cellulose Acetate (CA) that can be used as an alternative to traditional plastics. This product offers broad environmental benefits in the world's fight against plastic waste. CA, as the name would suggest, is a bio-based material made of cellulose (wood pulp base) with acetic acid, commonly known as vinegar. The resulting product is biodegradable under a range of temperature and bacteriological environments. While CA was developed in the early 1900s and is safe and effective in countless applications in its history, today it is primarily made into fiber for use in filtration applications.

Celanese is developing this material into a pellet form that can be used to replace conventional plastics while addressing many of the concerns raised by the Minister of Environment's Science Report on Plastic Pollution. Those products retain many of the features important to consumers who use them but do not have the same environmental impact. CA has been shown to have broad biodegradability in many different environments, meaning that even if CA products are not disposed of properly, they will degrade much faster than conventional plastics.

As the Minister of Environment & Climate Change has noted, their plan is focused on technological innovation to improve the products available to consumers. A targeted exemption for products derived from forests is precisely the innovation that can secure market access to bio-based Canadian goods. This is an excellent opportunity for the Standing Committee to raise this issue specifically. ***It is our view that CA embodies the innovation that the government's approach to plastic waste seeks to achieve.***

The Prime Minister has pledged to ensure that harmful plastics are prevented from entering the natural environment. We believe that CA's capability to biodegrade in aquatic and terrestrial environments separates it from traditional plastic. We are concerned that an overly broad definition of plastic will curtail our ability to offer this innovative solution in Canada by inadvertently eliminating a product that is not a risk to the environment. A definition that considers a product's biodegradability will act as a beacon for investment in Canada, which would offer a market for these new products.

It is imperative that future regulation does not define 'plastic' so broadly that it inadvertently captures materials that are not a risk to the environment, thus stifling important research and development opportunities. This was a significant failing of the European Commission's work on single-use plastic, one which our industry is working to rectify. For example, the definition of plastic in the EU includes modified starches and cellulose that are commonly found in many food and paper products.

We would urge the committee to adopt the following recommendation:

**The House of Commons Standing Committee on the Environment and Sustainable Development recommends that the Government of Canada exempt cellulose-based products from any proposed ban of single-use plastics.**

Our team members welcome the opportunity to speak to the Committee about the potential CA has to serve as a viable alternative to traditional plastic feedstocks in single-use plastics. This would be a win for the Canadian bio-economy and the natural environment.

Sincerely,



Lori J. Ryerkerk  
Chairman, Chief Executive Officer, and President  
Celanese Corporation

CC: Vice-Chairs of the Committee

BCC: Canadian Manufacturers and Exporters, Forest Products Association of Canada