Bill Title: House Bill 307 Environment – Packaging Materials – Producer Responsibility

Committee: Environment and Transportation

Date: January 31, 2022

Position: Report Favorably

Dear Chairman Barve and Honorable Members of the Committee:

On behalf of Eastman, thank you for the opportunity to provide comments on House Bill 307 Environment – Packaging Materials – Producer Responsibility (HB 307). As attention increases on the waste crisis, it is vital that a representative government, advocates, and private industry collaboratively develop solutions to reduce where it makes sense, reuse when possible, and recycle the rest. As a private industry stakeholder and materials supplier and recycler, Eastman supports legislation like HB 307 that was developed with input from a variety of stakeholders. Eastman cannot stress enough that **material-neutral extended producer responsibility policies like HB 307 will play a critical role in addressing the waste crisis by expanding collection and transportation, developing recycling markets, and, most importantly, keeping waste out of our environment.**

Founded in 1920, Eastman is a global specialty materials company that produces a broad range of products found in items people use every day. As a globally inclusive and diverse company, Eastman employs approximately 14,500 people worldwide and serves customers in more than 100 countries. In Maryland, Eastman operates a manufacturing facility in Chestertown where we produce materials used in building and construction, medical applications, and consumer goods.

The current pattern of consumption and disposal of plastics is not sustainable. Approximately 300 million tons of plastic are produced each year globally. At the end of use, 40 percent goes to landfills, 25 percent is incinerated, and 19 percent is disposed in unmanaged dumps or otherwise makes its way into the environment[1]. Per the US Environmental Protection Agency, only 9 percent is recycled in the United States.

The infrastructure needed to activate a truly circular plastics economy is missing. **A combination of incentives, mandates, and infrastructure investment, like those outlined in HB 307, can help expand the types and volume of materials collected, resulting in a stable, continuous supply of waste plastic feedstock.**

While traditional or mechanical recycling is necessary, the infrastructure and capability to process a range of plastics inhibit it from being the singular recycling solution to address the scale of the global waste plastic crisis. **By expanding recycling infrastructure and developing markets for hard to recycle plastics that are better suited for advanced recyclers, Maryland can truly close the loop on plastics production.**

In 2019, Eastman began commercial-scale molecular recycling, a form of material-to-material chemical recycling, for a broad set of waste plastics that would otherwise be landfilled, incinerated, or worse, end up in the environment. We see this as a key early step to address the challenges with today's limited recycling options. Eastman Advanced Circular Recycling technologies are designed to process waste plastics where traditional

mechanical recycling methods cannot, including polyesters, polypropylene, polyethylene, and polystyrene, derived from a variety of sources, including single-use plastics, textiles, and carpet. These platforms, which utilize both gasification and methanolysis technologies, provide a true circular solution of endless recycling for materials, allowing them to be reused repeatedly without sacrificing quality and performance.

Eastman performed an LCA on both of its advanced recycling technologies. These studies were critically reviewed by CE Delft and verified to conform with the leading international LCA methodology standards (ISO 1040 and 14044). **These LCAs confirm that by using waste plastic as a raw material to replace fossil fuels, Eastman's carbon renewal technology (reforming) can reduce greenhouse gas emissions in the production of a component (syngas) of new material by 20%–50%. Similarly, Eastman's polyester renewal technology (methanolysis) can reduce the greenhouse gas emissions for polyester intermediates production by 20%–30%.** Used alongside traditional or mechanical recycling to process waste otherwise destined for a landfill, incinerator, or the environment, Eastman's advanced material-to-material recycling technologies will contribute many more products to a circular life cycle.

A circular plastics economy is necessary to address a challenge as great as the global waste crisis. In other words, rather than proceeding on the linear pattern of creating, using and disposing of resources, we should establish a system that harnesses and unlocks the potentially infinite value of materials by keeping them in production – lifecycle after lifecycle – while simultaneously reducing greenhouse gas emissions by reducing dependence on fossil feedstocks. **When properly implemented, EPR schemes like the one proposed in HB 307 can help enable this circular economy.**

Eastman commends the state of Maryland and the Environment and Transportation Committee for pursuing the development of a responsible recycling policy and asks the Committee for a favorable report on HB 307.

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SOURCE: 1) www.mckinsey.com/industries/chemicals/our-insights/how-plastics-waste-recycling-could-transform-the-chemical-industry