

Save the Bay

Expanded polystyrene is polluting our waterways

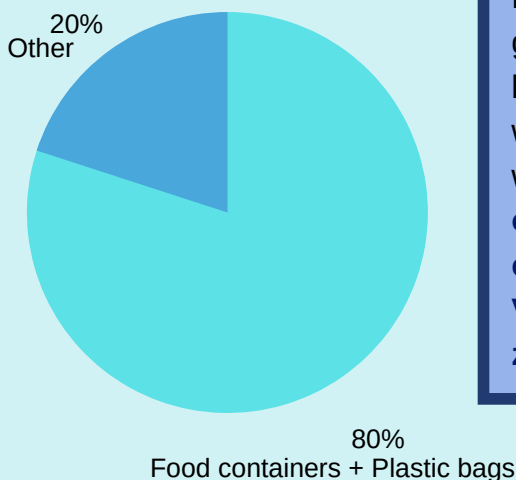
What is expanded polystyrene (EPS)?

Polystyrene is a petroleum-based plastic composed of the styrene chemical. Expanded polystyrene (EPS), commonly known as Styrofoam™, is utilized in various packaging and insulation products. It is commercially labeled as a #6 plastic.

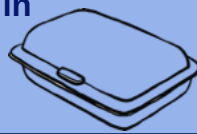
How is EPS polluting our waterways?

Despite its disposable and easy-to-use nature, the long-term effects of EPS waste are alarming. EPS products are non-biodegradable or take hundreds of years to break down. This, in turn, leads EPS to accumulate in landfills and waterways to dangerous levels. In fact, **approximately ¼ of EPS landfill waste is projected to end up in waterways in the form of microplastics** (small plastic fragments). These microplastics then persist in waterways and attract chemical contaminants.

Types of Marine Debris



Based off of data gathered over 20 years by the DEQ, food wrappers/ containers were in the **top 5 out of the top 20 most collected items in Virginia coastal zones.**



Impact of EPS pollution:

- Harms economically-important marine life due to accidental ingestion of microplastics
- Hurts fisheries
- Danger to seafood market
- Human health risks
- Leaching toxic chemicals, like styrene
- Swimming hazards on beaches
- Beach litter/ unclean beach environment

Policy Recommendation: Statewide Ban on EPS Food Containers

There are already 100+ ordinances across the United States that have banned the sale or distribution of polystyrene food containers. This year itself, the entire state of Maine has enacted this ban. However, Virginia has no such legislation. **A ban on EPS food containers in Virginia would greatly reduce polystyrene waste accumulation in landfills and subsequent waterway, economic, and health hazards listed above.** Other eco-friendly alternatives exist, and are even produced and sold in Virginia. These alternatives include PLA-plastics, paperboard, and bagasse-based (sugarcane) products.

References

1. Chandra, Manu; Kohn, Colin; Pawlitz, Jennifer; Powell, Grant. "The Real Cost of Styrofoam." Saint Louis University, 22 Nov. 2016, https://greendiningalliance.org/wp-content/uploads/2016/12/real-cost-of-styrofoam_written-report.pdf
2. Groh, Ksenia. "Microplastics in aquatic environment." Food Packaging Forum, 9 Nov. 2018, <https://www.foodpackagingforum.org/news/microplastics-in-aquatic-environment>
3. "Polystyrene Ordinances." Surfrider Foundation, <https://www.surfrider.org/pages/polystyrene-ordinances>
4. Virginia Coastal Zone Program. "Marine Debris in Virginia." Virginia Department of Environmental Quality, www.deq.virginia.gov/Programs/CoastalZoneManagement/CZMIssuesInitiatives/MarineDebris.aspx.

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