

Say No to Foam

Expanded polystyrene is polluting our waterways and taking up our landfill space

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.

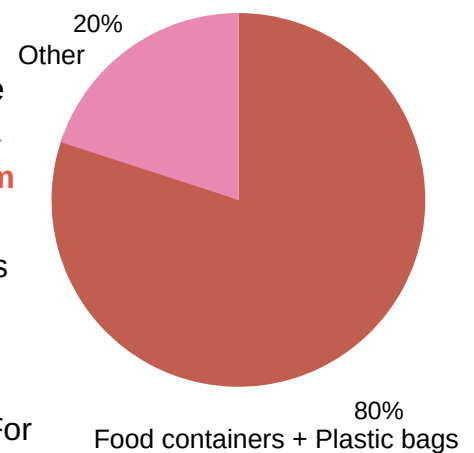
How is EPS polluting our waterways?

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. This poses risks to economically-important marine life and consumer health.

How is EPS taking up our landfill space?

Many waste companies import out-of-state waste into Virginia landfills. For counties with megalandfills, the waste importation industry has been a vital source of revenue, earning counties around **\$2.5 to \$6 million per year**. Although expanded polystyrene (EPS), also known as Styrofoam, is made up of 95% air, EPS takes up a lot of volume. In fact, **EPS makes up over 30% of all plastic waste by volume**. The space-taking nature of EPS threatens to consume the limited landfill space in Virginia, threatening the partnerships that offer a lifeline to industrial development.

Types of Marine Debris



Policy Recommendation: Statewide Ban on EPS Food Containers

100+ localities across the United States, including our neighbor Washington D.C., 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.

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.
5. Chandra, M; Kohn, C; Pawlitz, J; Powell, G. (2016, Nov. 22). The Real Cost of Styrofoam [PDF file]. Retrieved from https://greendiningalliance.org/wp-content/uploads/2016/12/real-cost-of-styrofoam_written-report.pdf
6. Not in My Landfill: Virginia and the Politics of Waste Importation [PDF file]. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.880.779&rep=rep1&type=pdf>
7. McFarland, L. (2018, July 2). Cumberland County Board of Supervisors approves landfill in split vote. Retrieved from https://www.richmond.com/news/local/central-virginia/powhatan-today/cumberland-county-board-of-supervisors-approves-landfill-in-split-vote/article_593ad4c0-7e14-11e8-a9d9-571cd8b8f8ff.html
9. Virginia Department of Environmental Quality (2009, June). A Proposed Landfill in Cumberland County The DEQ Application and Review Process. Retrieved from https://www.deq.virginia.gov/Portals/0/DEQ/Resources/Factsheets/GetTheFacts_CumberlandLandfill060409.pdf

Contact: ssd7fy@virginia.edu | khz7gy@virginia.edu