

REDUCING PLASTIC POLLUTION

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INTRODUCTION

The health of Virginia's rivers and streams is vital to a strong economy. A healthy Chesapeake Bay Watershed has an economic value of \$129.7 billion to the region.¹ The General Assembly took a notable first step in 2020 to reduce the overwhelming amount of plastic waste that is entering our communities, agriculture lands, and waterways. Providing localities with the authority to place a fee on single use plastic bags will enable them to craft policies that will reduce litter in Virginia. With the litter tax increased for the first time in 43 years, communities will be better funded to remove litter and institute effective waste reduction programs. However, two major sources of plastic pollution still need to be addressed in Virginia: balloons and Expanded Polystyrene (EPS) foam food service containers (also known as Styrofoam).

BACKGROUND

Plastic litter has wide-ranging destructive impacts on human health, wildlife, water infrastructure, and agricultural land. The direct cost of litter clean up is substantial. The Virginia Department of Transportation spends \$6.5 million a year picking up litter on roadways.²

Plastic litter is harming Virginia's agricultural land. Microplastics remain in the soil for decades, harming the natural flora of the soil and degrading soil quality. Researchers have also discovered that microplastics can contribute to low crop yields.³ Meanwhile, toxic chemicals from ingested plastic damage the health of livestock and even spread to humans through the consumption of milk and meat products.⁴

Wildlife – including turtles, birds, fish, mammals, and important filtering bivalves like oysters and mussels – often mistake plastic items for food.⁵ This is particularly prevalent in the use of plastic balloons – one of the most harmful and deadly litter items to wildlife. Burst balloons closely resemble jellyfish, a favorite food of sea turtles and other marine animals. Balloon ribbons also easily entangle birds and cause lasting damage.⁶ Unfortunately, intentional balloon releases, which are legal in Virginia, litter our waterways and landscapes with deadly plastic waste.

EPS foam containers for takeout food and beverages

are another major source of plastic pollution in Virginia. Made of styrene, a known hazardous substance linked to various types of cancer, EPS foam is a petrochemical derived product that is a serious concern for human health and wildlife. Toxic chemicals from EPS foam containers can leach into food and drinks and then be ingested, especially when the food or beverage is served hot. People who work in areas with high concentrations of styrene have increased rates of cancer, neurological issues, and depression.⁷ For low-income communities and communities of color, this concern is especially acute. Often suffering from insufficient access to grocery stores with affordable and nutritional food, these communities are forced to rely on fast food options, which are often stored in EPS containers.⁸

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The chemical industry has argued that recycling is the solution to their harmful products, but the New York City Department of Sanitation recently determined that EPS foam food containers cannot be recycled in a manner that is economically feasible or environmentally effective for New York City.⁹ Global plastic production is projected to quadruple between 2014 and 2050.¹⁰ We cannot recycle our way out of this problem; we must find solutions to reduce plastic at the source.

Eliminating the production and consumption of single-use plastic products is an effective way to reduce plastic pollution and combat this global crisis. After the California cities of Santa Cruz and Pacific Grove banned EPS foam food containers, EPS litter on local beaches decreased by as much as 71 percent.¹¹ And it's possible to replace EPS food containers with a minimal increase to cost – on average, plastic-free alternatives are only \$0.01 more expensive.¹²

During the COVID-19 pandemic, the plastics industry has raised concerns over the risk of transferring the virus through reusable food containers and other packaging. The Centers for Disease Control (CDC) has recognized that the virus spreads through respiratory droplets and that transmission of the virus from surface contact has never been documented.¹³ It is possible

to decrease use of single-use plastics in a safe and sanitary measure, and this should not deter work to combat plastic pollution.

CONCLUSION

Virginians' health, communities, and natural areas are under siege from plastics. Plastics are now found in our air, water, and soil. Recycling has been overwhelmingly shown to not be a feasible solution. Our elected officials need to enact efficient waste reduction policies and encourage businesses as well as Virginians to reduce waste generation to protect Virginia residents, communities, and our environment from the scourge of plastic litter.

POLICY RECOMMENDATIONS

Ban the use of expanded polystyrene food service containers. HB 533 passed the 2020 General Assembly with a reenactment clause requiring the bill to be confirmed in 2021.

Address balloon releases by amending Virginia's current law and making the intentional outdoor release of any balloons illegal and subject to a civil penalty. Exceptions would be made for state or federal agency purposes, such as weather balloons.



LITTER CLEANUP IN RICHMOND, VA. ON CLEAN THE BAY DAY
Image credit: Kenny Fletcher