



For a thriving New England

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By Email

Senator Christine Cohen
Representative Dorinda Borer
Environment Committee
Legislative Office Building, Room 3200
Hartford, CT 06106

RE: *HB 6502, An Act Concerning the Use of Certain Polystyrene Products, the Availability of Single-Use Straws, the Release of Certain Balloons and the Compostable Nature of Single-Use Produce Bags*

Dear Chairs Cohen and Borer:

Thank you for the opportunity to provide testimony in support of HB 6502, An Act Concerning the Use of Certain Polystyrene Products, the Availability of Single-Use Straws, the Release of Certain Balloons and the Compostable Nature of Single-Use Produce Bags. Conservation Law Foundation (CLF) is a member-supported nonprofit organization working to conserve natural resources, protect public health, and build healthy communities throughout New England. Through its Zero Waste Project, CLF aims to protect our communities and our environment from the dangers of unsustainable plastic use.

CLF supports HB 6502. This legislation would help combat the harmful impacts of single-use plastics by prohibiting restaurants and caterers from providing single-use expanded polystyrene food and beverage containers, discontinuing the use of expanded polystyrene food trays in public schools, limiting single-use plastic straws in restaurants, and prohibiting all intentional balloon releases.

I. Plastics are Fossil Fuels.

Plastics pollute at every stage of their life cycle.¹ More than ninety-nine percent of plastics are derived from fossil fuels, often sourced from fracked gas in the United States.² The extraction of fracked gas releases over 170 different toxic chemicals that can cause cancer and liver, kidney,

¹ Lisa Anne Hamilton, *Plastic & Climate: The Hidden Costs of a Plastic Planet*, 8 (2019), <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>.

² *Id.* at 2.

neurologic, reproductive, and developmental damage.³ The facilities that refine this fracked gas into plastic resins release dangerous toxics like carbon monoxide, nitrogen oxides, benzene, and toluene into nearby communities.⁴

Plastics also present a significant risk to our climate. As we wean ourselves off fossil fuels to power our cars and heat our homes, the fossil fuel and petrochemical industries are focused on expanding plastics production.⁵ Without measures like HB 6502, yearly worldwide plastics production is projected to rise from 837 billion pounds in 2015 to almost 4 trillion pounds in 2050.⁶ At this rate of increase, carbon emissions from the production and incineration of plastics will consume up to 13 percent of the planet's remaining carbon budget, making it nearly impossible to stay below a 2°C warming target.⁷

II. Expanded Polystyrene Is Dangerous and Unrecyclable.

Banning expanded polystyrene food and beverage containers and school trays will protect Connecticut's residents and environment from harmful toxics and plastic pollution. Benzene, a building block for polystyrene, is a known carcinogen.⁸ Styrene, the monomer for polystyrene, is also a known carcinogen.⁹ Styrene is released from expanded polystyrene when it is exposed to heat, such as when hot food and beverages are served in polystyrene containers.¹⁰ Released styrene leaches into food and beverages, making polystyrene among the most hazardous options for food packaging.

Annual global polystyrene production amounts to more than 14 million tons, and Americans throw away an estimated 25 billion polystyrene cups each year.¹¹ Less than one percent of that

³ David Azouly, *Plastic & Health: The Hidden Costs of a Plastic Planet*, 12–14 (2019), <https://www.ciel.org/wp-content/uploads/2019/02/Plastic-and-Health-The-Hidden-Costs-of-a-Plastic-Planet-February-2019.pdf>.

⁴ *Id.* at 17–21.

⁵ Sharon Kelly, *Why Plans to Turn America's Rust Belt into a New Plastics Belt Are Bad News for the Climate*, DeSmog (Oct. 28, 2018), https://www.desmogblog.com/2018/10/28/petrochemical-industry-america-rust-belt-plastics-fracking-climate?fbclid=IwAR3hmco5Dy1hXsP7MvC1f86_-HP4i1v-QndYpwrVYglbyrmh5KstzgKxEME_.

⁶ See Azouly, *supra* note 3, at 6.

⁷ Hamilton, *supra* note 1, at 19.

⁸ The American Cancer Society. *Benzene and Cancer Risk*. Retrieved from: <https://www.cancer.org/cancer/cancer-causes/benzene.html>.

⁹ See Azouly, *supra* note 3, at 36.

¹⁰ *Id.* at 31.

¹¹ Manu Chandra, *The Real Cost of Styrofoam*, 8 (2016), https://greendiningalliance.org/wp-content/uploads/2016/12/real-cost-of-styrofoam_written-report.pdf.

polystyrene is recycled.¹² Expanded polystyrene cannot be recycled through Connecticut's single-stream recycling programs.¹³

More than 11,000 tons of food-grade expanded polystyrene end up in Connecticut's trash every year.¹⁴ The vast majority of those 11,000 tons are burned in Connecticut's waste incinerators. Burning polystyrene emits persistent organic pollutants (POPs), dioxins, polychlorinated biphenyls (PCBs), lead, arsenic, and mercury—all of which are toxic.¹⁵ Plastic incineration also results in large-scale greenhouse gas emissions.¹⁶

Even though it cannot be recycled, a significant amount of expanded polystyrene—up to 1,000 tons—nonetheless ends up in Connecticut's single-stream recycling each year.¹⁷ Because expanded polystyrene so readily breaks down into small pieces, its presence threatens Connecticut's single-stream recycling programs by contaminating, and diminishing the value of, other recyclables.¹⁸

Expanded polystyrene containers are also significant source of plastics pollution in our environment. Connecticut River Conservancy's 2019 Source to Sea Cleanup of the Connecticut River System collected 1,363 expanded polystyrene cups and 1.46 cubic yards of polystyrene pieces.¹⁹ Ocean Conservancy's 2019 International Coastal Cleanup collected more than **21**

¹² See *id.* at 14.

¹³ See Gregory Hladky, *Here's a list of everything you can and can't recycling in Connecticut*, Hartford Courant (Mar. 10, 2019), <https://www.courant.com/news/connecticut/hc-news-recycling-visual-list-20190310-mh7fxrkvlvcovay7zc24woavxq-story.html>; Recycle Connecticut, *What's In, What's Out*, <https://www.recyclect.com/in-the-bin.html>.

¹⁴ See Connecticut Dep't. of Energy and Env'tl. Prot. (DEEP), *2015 Statewide Waste Characterization Study*, 3-5 (2016), https://www.ct.gov/deep/lib/deep/waste_management_and_disposal/Solid_Waste_Management_Plan/CMMS_Final_2015_MSW_Characterization_Study.pdf.

¹⁵ See Azouly, *supra* note 3, at 44–47.

¹⁶ See U.S. EPA, *Solid Waste Management and Greenhouse Gases, a Life-Cycle Assessment of Emissions and Sinks*, 76 (3d ed. 2006)

¹⁷ See DEEP, *supra* note 14, at 4-7.

¹⁸ See Comm'r Kathryn Garcia, NYC Dep't of Sanitation, *Determination on the Recyclability of Food-Service Foam*, 42 (2017), https://www1.nyc.gov/assets/dsny/docs/2017-0512FoamDetermination_FINAL.pdf.

¹⁹ Connecticut River Conservancy, *Cleanup Chronicle: 23rd Annual Source to Sea Cleanup*, 5 (2019), <https://www.ctriver.org/wp-content/uploads/CRC-Cleanup-Chonicle-2019-FINAL-web.pdf>.

million pieces of expanded polystyrene from beaches worldwide.²⁰ This included 1,585 pieces of plastic and polystyrene packaging collected from Connecticut beaches.²¹

Due to its tendency to break into smaller pieces, expanded polystyrene is a major contributor to microplastic pollution, which poses significant risks to wildlife and human health.²² Fish, seabirds, sea turtles, and marine mammals can be killed after ingesting microplastic particles. Humans are exposed to microplastics in drinking water, food, and even the air we breathe.²³ Microplastics can carry dangerous bacteria and can lead to inflammation, tissue damage, and carcinogenesis.²⁴

III. Single-Use Plastic Straws Are a Significant Source of Plastic Pollution.

By quantity, plastic straws and stirrers placed third on the Ocean Conservancy's list of collected waste from worldwide beach cleanups in 2019. Those cleanups collected more than 3.6 million straws and stirrers.²⁵ As ocean and land-based pollution, single-use plastic straws pose a danger to wildlife—many animals mistake them for food, causing injury, starvation, or suffocation. The dangers to wildlife posed by straw pollution played a significant role in elevating plastic as a global issue after a viral video of a sea turtle with a straw stuck in its nose circulated on the internet.²⁶

As with all ocean plastic pollution, straws break down into microplastics which can do long-lasting harm to living organisms (including humans) and are now ubiquitous in the environment.²⁷ Compostable plastic straws are no better than their traditional, petroleum-based

²⁰ Ocean Conservancy, *The Beach and Beyond: 2019 Report*, 3 (2019), <https://oceanconservancy.org/wp-content/uploads/2019/09/Final-2019-ICC-Report.pdf>.

²¹ *Id.* at 23.

²² Andrea Thomsson, *From Fish to Humans, a Microplastic Invasion May Be Taking a Toll*, *Scientific American* (September 4, 2018), <https://www.scientificamerican.com/article/from-fish-to-humans-a-microplastic-invasion-may-be-taking-a-toll/>.

²³ *Id.*

²⁴ See Azouly, *supra* note 3, at 56–57.

²⁵ The Ocean Conservancy, *The Beach and Beyond: 2019 Report*, <https://oceanconservancy.org/wp-content/uploads/2019/09/Final-2019-ICC-Report.pdf>.

²⁶ Heidi Siegmund Cuda & Elizabeth Glazner, *The turtle that became the anti-plastic straw poster child*, Plastic Pollution Coalition (November 11, 2015), <https://www.plasticpollutioncoalition.org/pft/2015/10/27/the-turtle-that-became-the-anti-plastic-straw-poster-child>.

²⁷ Andrea Thomsson, *From Fish to Humans, a Microplastic Invasion May Be Taking a Toll*, *Scientific American* (September 4, 2018), <https://www.scientificamerican.com/article/from-fish-to-humans-a-microplastic-invasion-may-be-taking-a-toll/>.

counterparts if not disposed of properly — compostable plastic is designed to break down in an industrial compost facility, not in your backyard compost pile and not in the ocean.²⁸

IV. Intentional Balloon Releases Pose an Unnecessary Risk to the Environment.

Intentionally released balloons inevitably end up as debris on our land and in our oceans, where they entangle and are eaten by animals.²⁹ A 2018 study of dead sea birds in Australia and New Zealand found that of all the marine debris consumed by the birds, balloons were the most likely to be deadly.³⁰ The study concluded that birds that had ingested balloon fragments were 32 times more likely to die than those that had ingested hard plastics.³¹ And a 2016 survey of marine experts indicated that balloons pose significant ingestion and entanglement risks to birds, sea turtles, and marine mammals.³²

V. HB 6502 Is an Important Step in the Fight Against Plastic Pollution.

To fight the plastics crisis, we need to turn off the tap; we need to stop relying on single-use plastics. HB 6502 is a step in that direction.

Norwalk, Westport, and the Town of Groton have passed ordinances limiting polystyrene products.³³ So too have forty-six Massachusetts towns and cities,³⁴ along with Barrington, Rhode Island.³⁵ In 2019, Maine³⁶ and Vermont³⁷ banned polystyrene food service containers,

²⁸ Sarah Gibbens, *What you need to know about plant-based plastics*, National Geographic (November 15, 2018), <https://www.nationalgeographic.com/environment/2018/11/are-bioplastics-made-from-plants-better-for-environment-ocean-plastic/>.

²⁹ See Debra Duncan, *Balloons Pose a Risk to Wildlife & the Environment*, Environmental Nature Center, <https://www.encenter.org/visit-us/programs/birthday-parties/balloons/>.

³⁰ Lauren Roman, *A Quantitative Analysis Linking Seabird Mortality and Marine Debris Ingestion*, Scientific Reports, Mar. 12 2019, at 5, <https://www.nature.com/articles/s41598-018-36585-9.pdf>.

³¹ *Id.*

³² Chris Wilcox, *Using Expert Elicitation to Estimate the Impacts of Plastic Pollution on Marine Wildlife*, 65 Marine Policy 107, 110–12 (2016).

³³ See Kimberly Drelich, *Groton plastic, polystyrene reduction ordinance to start July 7*, The Day (Feb. 14, 2020), <https://www.theday.com/article/20200214/NWS01/200219587>.

³⁴ Massachusetts Sierra Club, *Polystyrene & Food Packaging*, <https://www.sierraclub.org/massachusetts/polystyrene-food-packaging> (Last visited Feb. 4, 2020).

³⁵ Town of Barrington, *Polystyrene Ban*, <http://www.barrington.ri.gov/topics/polyban.php>.

³⁶ Gianluca Mezzofiore, *Maine Becomes the First State to Ban Styrofoam*, CNN (May 1, 2019), <https://www.cnn.com/2019/05/01/us/maine-ban-styrofoam-trnd/index.html>.

³⁷ Zach Tomanelli, *VT Lawmakers Approve Nation's Strongest Anti-Plastic Pollution Legislation*, VPIRG, (May 22, 2019), <https://www.vpirg.org/news/vt-lawmakers-approve-nations-strongest-anti-plastic-pollution-legislation/>.



and Rhode Island and Massachusetts are currently considering statewide bans. And California,³⁸ Oregon,³⁹ and Vermont⁴⁰ have enacted statewide laws requiring that straws be provided only upon request.

Connecticut has an opportunity to join these states and become a regional leader in the fight against plastic pollution with HB 6502.

For these reasons, **CLF urges this committee to support HB 6502.** CLF respectfully suggests that Sections 2 and 3 of HB 6502 be amended to provide that no “food establishment,” as that term is defined in section 19a-36g(13) of the general statutes, shall provide or distribute a single-use expanded polystyrene container to a consumer or provide a single-use plastic straw to a consumer unless requested by the consumer. This will broaden the scope of covered establishments, and it will more effectively limit the distribution of expanded polystyrene containers and single-use plastic straws in Connecticut.

Thank you for the opportunity to submit this testimony.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Budris", written in a cursive style.

Kevin Budris
Staff Attorney, CLF Zero Waste Project

³⁸ See Cal. Pub. Res. Code § 42270-71.

³⁹ Or. Rev. Stat. § 616.892.

⁴⁰ See Vt. Stat. Ann. Tit. 10, § 6694.