

Subcommittee on the Environment: House Committee on Oversight and Reform

**Testimony of Judith Enck, President of Beyond Plastics,
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**Plastic Production, Pollution, and Waste in the Time of COVID-19:
The Life-Threatening Impact of Single-Use Plastic on Human Health**

Thank you for the invitation to appear before you today on this urgent issue—the need to turn off the tap of plastic pollution.

My name is Judith Enck. I served as Regional Administrator at the Environmental Protection Agency, Region 2, appointed by President Obama.

I am currently the President of Beyond Plastics and teach classes on plastic pollution at Bennington College in Bennington, Vermont. Our goal at Beyond Plastics is to eliminate plastic pollution everywhere. That usually garners a few uncomfortable chuckles, but we are serious.

Plastic pollution is a major public health and environmental problem that gets worse every year. To date, the federal response from Congress and federal agencies has been utterly inadequate. I am looking forward to this changing, as evidence of your convening today.

Here is why I believe we can make progress: unlike climate change, there are very few “plastic pollution deniers.” That is because we can all see that plastic pollution is everywhere.

We see it in our neighborhoods, littering our parks, floating in our streams, flapping in our trees, and washing up on our beaches.

Nine million metric tons of plastic enters the oceans each year. Most of it comes from being washed off land or passing through sewage treatment plants. Plastic litter gets into storm drains, enters streams and rivers, then washes into the ocean where sunlight makes the plastic brittle and the waves act like a paper-shredder. A single plastic bottle or plastic bag becomes hundreds, then thousands, of tiny pieces of plastic.

These small plastic particles are called microplastics—a term that did not even exist until the mid-2000s. Microplastics are pieces of plastic up to five millimeters in diameter—the same size as a grain of sand. These microplastics are ingested by filter-feeding marine organisms such as oysters and mussels, which, in turn, are eaten by many other animals, including humans. Plastic pieces of all sizes often look and smell like food to larger animals like fish, sea turtles, manatees, and seabirds. With bellies full of plastic that they can neither digest nor expel, the animals feel

full and stop eating, often starving to death. Whales are washing up dead on shorelines with bellies full of plastic trash. According to NOAA, one million seabirds are killed by plastics in the ocean every year. And if you have not seen the video of the sea turtle with a plastic straw stuck in its nostril¹, you should.

The ocean provides over 200 billion pounds of food for people around the world each year. And we are turning our rivers and oceans into unpermitted landfills. Unless we significantly change the way we use plastics—especially single-use plastic packaging—experts predict there will be one pound of plastic in the ocean for every three pounds of fish in the next decade.

A new study in the journal *Science*², by Dr. Janice Brahney at Utah State University, found a significant amount of plastic particles in some of our country's most remote places, from Joshua Tree National Park in California to the Wind River Range in Wyoming. Scientists found more than 1,000 metric tons of microplastics in 11 remote scattered locations, deposited by wind and rain. Another recent study found microplastics in sea mist³.

Microplastics are in our water, air, and soil, in fish and wildlife, in beer and table salt⁴, and in you and me. A study from Australia's University of Newcastle found that each adult ingests the equivalent of a credit card's worth of plastic (five grams) each week⁵. The human health impacts of exposure to plastic pollution are just beginning to receive much-needed scientific attention.

This is what we are doing to our oceans. This is what we are doing to our earth. This is what we are doing to ourselves—just because companies pump out cheap single-use plastic rather than utilizing reusable, refillable, or truly recyclable materials.

Plastic production is also a significant driver of climate change. Plastics used to be made from toxic chemicals and oil but they are now made from toxic chemicals and ethane—a by-product of hydraulic fracturing or hydrofracking that is created in massive, new facilities called ethylene cracker plants. These facilities are super-emitters of greenhouse gases and air toxins such as benzene. They are making the climate crisis worse.

As the world moves toward more renewable energy and cleaner transportation options and the use of fossil fuels for energy production and transportation wanes, the petrochemical industry is placing a big bet on increasing the manufacturing of single-use plastic packaging production to provide an alternative market for fossil fuels.

¹ <https://www.youtube.com/watch?v=4wH878t78bw>

² <https://science.sciencemag.org/content/368/6496/1257>

³ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0232746>

⁴ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0194970>

⁵ <https://www.newcastle.edu.au/newsroom/featured/plastic-ingestion-by-people-could-be-equating-to-a-credit-card-a-week/how-much-microplastics-are-we-ingesting-estimation-of-the-mass-of-microplastics-ingested>

As of February 2020, 343 new plastic production plants and expansions were either approved or planned. Around the world, the rate of plastic production is projected to increase by a third, and by 2050, it is expected to triple.

I do not believe the EPA has a handle on how to effectively regulate these facilities, especially since the current EPA does not use its legal authority to regulate carbon emissions—and is quite timid about enforcing federal environmental laws.

We cannot solve the climate crisis without reducing the production of plastics.

Despite decades of widespread, misleading advertising by plastic producers, recycling is not a viable solution to the plastics problem. I am a big supporter of recycling, but we cannot recycle our way out of the plastic pollution crisis. According to the EPA, the current plastics recycling rate is an anemic 8%—and that occurred prior to China closing its doors to U.S. recyclables in 2018 due to the high contamination rates caused by “single stream” recycling.

Compare plastics’ 8% to the following recycling rates:

- Paper and paperboard: 66%
- Ferrous Metals: 33%
- Glass: 27%
- Aluminum: 16%

Even though most plastic packaging displays the iconic recycling symbol, if you are a local government, you are only able to find markets to recycle number 1 and number 2 plastics, PET, and HDPE. All the rest likely goes to a landfill or an incinerator. But the plastic industry wants us to just keep putting plastics in the recycling bin, causing major headaches for local governments and waste haulers and perpetuating the myth that plastic recycling actually works so that business as usual can continue.

Whether it is able to be recycled or not, the United States is generating too much waste. In 2017, the U.S. generated 268 million tons of municipal solid waste. That number does not even include hazardous waste and industrial waste. Think of it this way: the average American generates 4.5 pounds of solid waste every day. Even if you are very careful about your consumer choices, it is impossible to avoid plastic.

That is why systemic change is needed and new laws need to be adopted.

Many plastic producers want tax dollars invested in dubious projects to attempt to destroy plastic waste, including: chemical recycling, pyrolysis, gasification, waste-to-fuel, and incineration. Those projects often fail, rarely survive without substantial taxpayer subsidies, and keep the status quo of massive plastic production flowing into our environment. They are also a

source of air pollution and in the case of incinerators, massive amounts of ash that needs to be landfilled. The fly ash is toxic.

A better approach is to turn off the plastic production tap as required in House bill H.R.5845/ Senate bill S.3263 introduced by Representative Lowenthal and Senator Udall in February 2020, the Break Free From Plastic Pollution Act.

Here is a good way to think about this legislation: you walk into your bathroom and see that the bathtub is overflowing. Do you reach for a cup to try to bail out the water from the overflowing tub, or do you turn off the tap?

The Break Free From Plastic Pollution Act includes policies that will turn off the plastic pollution tap:

- It requires product producers, rather than taxpayers, to take responsibility for the waste they produce, placing the burden for this pollution where it belongs.
- It includes a national container deposit system, based on the effective bottle bills that are successfully boosting aluminum and glass recycling rates and decreasing litter in nine states.
- It phases out some of the most littered single-use plastic packaging items including plastic bags, polystyrene, plastic utensils, and plastic straws that would remain available only upon request, an important requirement for the disabled.
- It creates minimum recycled content requirements, requires standard labeling, prevents plastics to be exported to developing countries that cannot manage it, and puts a pause on new ethylene cracker facilities to allow the EPA to first investigate the cumulative impacts of new and expanded plastic production facilities on our air, water, and climate.

These facilities are almost always built in low-income communities of color. They are never proposed in affluent communities. The same holds true for landfills and incinerators. As the U.S. struggles with the COVID-19 health crisis and as we are reminded of the painful history of racial and economic inequality in our country, we must ask ourselves: how can we do better on these issues of environmental justice? What do we want our post-COVID world to look like?

Congress must work to ensure that we reverse course and shift to products and materials that can be refilled and reused. For those that cannot be reused, they must be more effectively recycled or composted. This approach creates far more jobs than our current culture that relies on single-use and throwaway products.

Congress must stop the siting of polluting, unhealthy plastic production facilities in poor and minority communities.

Congress must adopt bills with teeth that eliminate plastic pollution, everywhere. And stop exporting our non-recyclable plastic trash to other countries, most notably in Asia and Africa.

We need Congress to be part of the solution and we need the EPA and NOAA to step up their work and make sure that our post-COVID world is not plagued by plastics.

The data is there.

The public in every state and territory is paying attention to this issue.

We need Congress to make this a priority and find the political will to act.

Every year that Congress does not act, the problem only gets worse.

Thank you.