Testimony of Kate Donovan, Northeast Regional Lead, Environmental Health, Natural Resources Defense Council before the New York State Senate and Assembly Environmental Conservation Committees in Support of the Packaging Reduction and Recycling Infrastructure Act (S4246A /A5322A)

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Thank you for the opportunity to testify today on behalf of the Natural Resources Defense Council. My name is Kate Donovan and I am a senior attorney within our Toxics team and the Northeast Regional Lead for Environmental Health. Addressing climate change and protecting people's health are two of NRDC's most important north stars. Today I am here to advocate our strong support for the Packaging Reduction and Recycling Infrastructure Act (S4246A /A5322A), as this legislation has a real opportunity to meaningfully address these key goals and serve as a model for states around the county.

In fact, I sat before this joint committee four years ago urging many of the same messages as today. In that period, the state has made little progress in solving the dire solid waste and plastic crises of today, and even slid backwards during the Covid-19 pandemic, which delayed the enforcement of the ban on single-use plastic bags and impacted the states movement on banning additional single-use plastics, such as cutlery, straws and stirrers.

Climate change and plastics are inextricably linked. 99% of plastics are made from fossil fuel feedstocks and the plastic production lifecycle is estimated to account for 19 percent of the total global carbon budget by 2040.[1] In addition, the ways plastics impact our health continues to grow as more is learned about the toxics chemicals that leach into our food and microplastics that shed into our homes and environment. And not insignificant, the state continues to face a solid waste crisis – with landfills nearing capacity, waste trucked hundreds of miles within and out of state (contributing to greenhouse gas emissions), and continued reliance on ten incinerators across the state pose significant threats to public health and the environment, the majority of which are cited in environmental justice communities.[2] New York has the second highest number of incinerators in the US – this is unacceptable.[3]

[1] UN Development Programme, "What do plastics have to do with climate change?" November 15, 2022, accessed Oct. 21, 2023.
[2] "Burned: Why Waste Incineration Is Harmful," Natural Resources Defense Council, Blog by Daniel Rosenberg, July 19, 2021.
[3] U.S. EPA, Map of Commercial Waste Combustors in the U.S, accessed Oct 21, 2023.

The Packaging Reduction and Recycling Infrastructure Act will put New York on a path to create real transformative change. This bill has the potential to slash the use of plastic packaging and problem plastics, expand recycling infrastructure and capabilities, incentivize more durable and more easily recyclable products, spur the development of reusable or refillable programs, and support municipalities. There are three key features of the bill that I'd like to focus my testimony on.

Strong reduction and recycling rates

The legislation rightly centers strong waste reduction targets and increased recycling rates and it is the best chance in years to advance the State's solid waste hierarchy and give waste reduction and reuse the attention they deserve.

The emphasis on front-end strategies is critical now, we cannot recycle our way out of the solid waste and plastic pollution crisis. The overall recycling rate for plastics in the United States is a meager 5-6%,[4] despite decades of voluntary industry pledges and programs, and taxpayer-funded curbside collection systems that almost exclusively target only PET and HDPE containers. Unlike glass, steel, and aluminum, plastic is simply not designed to be recycled. Municipal curb side programs cannot keep up with the volume of waste – the majority of which is containers and packaging.[5] The legislation uniquely recognizes the extreme costs of plastic packaging. Approximately forty percent of plastic manufactured is used for consumer packaging – most of which is used once and then discarded.[6]

The bill appropriately incorporates primary plastic packaging waste reduction standards that must be met over time, including:

- 50% reduction of packaging materials within 12 years with incremental milestones.
- 75% recycling rate of the remaining packaging waste by 2050, also achieved incrementally, with separate criteria for non-plastic and plastic packaging
- All packaging materials must be truly reusable or recyclable. The bill accomplishes this by requiring packaging to meet certain criteria on recyclability and design characteristics, such as no use of non-recyclable pigmented plastics or other plastics that are problematic for recycling infrastructure.

Restrict hazardous chemical additives and toxic substances in packaging

NRDC in its latest fact sheet, "*The Worst of the Worst: High-Priority Plastic Materials, Chemical Additives, and Products to Phase Out*" calls for the immediate phase out of the production and use of plastic polymers, chemical additives, and types of plastic products that pose the greatest hazards and/or are unnecessary. Some of the greatest threats come from polyvinyl chloride and polyvinylidene chloride, polystyrene, and polycarbonate. All of which are materials used in packaging.

[4] "Circular Claims Fall Flat Again: 2022 Update." Greenpeace, Oct. 24, 2022.
[5] U.S. EPA, Containers and Packaging: Product-Specific Data, accessed Oct 22, 2023.
[6] "Fast facts about plastic pollution," National Geographic, Dec 20, 2018.

More than 10,500 chemical additives are used to manufacture plastic packaging, most of which have never been studied, and those that have been studied are known to disrupt human endocrine systems or cause cancer. These toxic and endocrine- disrupting substances can leach out of packaging into the food and beverages we consume, and into our bodies: contributing to diabetes, heart disease, endocrine- related cancers, obesity, and infertility–just to name a few.[7]

PFAS are also associated with plastics in several ways, and all of which are of concern. PFAS are harmful even at ultralow levels and are linked with cancer, hormone disruption, liver and thyroid problems, interference with vaccine effectiveness, reproductive harm, and abnormal fetal development. They contaminate water, human bodies, and wildlife worldwide. PFAS compounds are intentionally added to plastic packaging or used during its manufacture and pose a significant risk.[8]

The legislation importantly prohibits the most toxic substances and materials from being used in packaging, including polyvinyl chloride (PVC), PFAS ("forever chemicals"), formaldehyde, bisphenols, toluene, and heavy metals including lead, cadmium, and mercury.

Promote improvements and investments in traditional recycling infrastructure, not chemical recycling

"Chemical" or "advanced recycling" is the latest false solution being touted by the American Chemistry Council, fossil fuel, and plastic manufactures to solve our plastic waste crisis by turning plastics into fuel or lower quality plastics. These technologies are not like traditional mechanical recycling operations. Indeed, they rely on industrial processes without established track records in commercial applications. As a recent National Academy of Sciences study reported: "Such processes remain unproven to handle the current plastic waste stream and existing high-production plastics."[9]

The term "chemical recycling" encompasses many processes that fall into two categories: plastic-to-fuel and plastic to-chemical components. Chemical "recycling" uses high temperatures, pressure, and/or solvents to melt or boil plastics down into gasses, chemicals, oils, and/or tars. These processes create air pollution and toxic residues. Most chemical "recycling" turns plastics into fossil fuels, but plastic-to-plastic applications also creates toxic pollution, often adding to the cumulative burden of pollution on low-income communities of color. The impacts of these technologies are not proven and inconsistent with environmental protection and pollution

[7] "The Minderoo-Monaco Commission on Plastics and Human Health." Landrigan, Philip J. et al., Annals of Global Health, Mar. 21, 2023.
[8] "The Worst of the Worst: High-Priority Plastic Materials, Chemical Additives, and Products to Phase Out," Natural Resources Defense Council, Fact Sheet, October 2023.
[9] "Reckoning with the U.S. Role in Global Ocean Plastic Waste," National Academy of Sciences, Engineering & Medicine (2022) at 71.

reduction. Both categories of "chemical recycling" are fraught with health, environmental, social, and economic concerns.[10]

Moreover, NRDC's "Recycling Lies: 'Chemical Recycling' of Plastics Is Just Greenwashing Incineration" revealed that these facilities are sources of hazardous air pollution and generators of hazardous waste. Significantly, the American Chemistry Council cannot point to a single state or city that is relying on "chemical" or "advanced recycling" to handle their plastic municipal waste in an environmentally and economically successful manner. The Packaging Reduction and Recycling Infrastructure Act includes strong language that should be preserved to ensure the door stays closed to unproven chemical recycling technologies.

There is no denying there are many critical reasons to swiftly pass the Packaging Reduction and Recycling Infrastructure Act during the upcoming legislative session starting in January 2023. Thank you for your time.

[10] "Recycling Lies: 'Chemical Recycling' of Plastic is Just Greenwashing Incineration." Natural Resources Defense Council, Report by Veena Singla, Feb. 2022.