



HB1092
Recycling – Prohibition on the Chemical Conversion of Plastic
Testimony before The Environment and Transportation Committee
Hearing February 26, 2025
Position: Favorable

Dear Chair Delegate Korman and Vice Chair Delegate Boyce, and members of the committee, my name is Julia Lawrence, and I represent the 900+ members of Indivisible Howard County. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members).

We are providing written testimony today **in support of HB1092**. This bill would alter the definition of “recycling” to exclude certain processes relating to the chemical conversion of plastic such as pyrolysis, hydrolysis, methanolysis, gasification, enzymatic breakdown, and any similar chemical conversion process as determined by the Department of the Environment. HB1092 would prohibit a person from building in Maryland a facility that converts plastic to fuel or feedstock through chemical conversion processes.

We thank Delegate Terrasa and her colleagues for sponsoring this bill.

We are supporting HB1092, because it would ensure that the negative health and environmental impacts of operating a chemical conversion plant would be avoided in Maryland.

“Chemical recycling” is an umbrella term for a set of technologies that convert plastic waste either into fuel or raw materials, or “feedstock,” [1] for new plastics. The term encompasses the process of conversion, decomposition, and purification [2] of plastic, which include the processes of pyrolysis, hydrolysis, methanolysis, gasification, and enzymatic breakdown. [3] [4] [5]

Chemical recycling is not considered by ISO, the EU Environmental Commission, the Ellen MacArthur Foundation, or many other groups [6], to be standard recycling which returns materials back into the consumer production cycle offering economic and ecological benefits. [7] Chemical recycling is considered by these groups to be plastic “incineration.” [8]

Chemical recycling emissions cause serious health concerns like cancer, emit more pollution than regular recycling, and accelerate climate change. [9] Data from the EPA show that one chemical conversion plant can generate nearly 500,000 pounds of hazardous waste in one year

alone. [10] This waste consists primarily of benzene, along with other toxins such as lead, cadmium, and chromium, which are known carcinogens. [11] [12]

The rise of chemical recycling waste would lead to immense challenges for nearby and downwind communities in Maryland where these plastics are either produced, landfilled, or incinerated, and would frustrate efforts to reduce waste and greenhouse gas emissions. [13]

An alternative to creating fuel from chemical conversion plants is for Maryland to proceed to develop clean energy projects which would make affordable, accessible technologies available to all Marylanders. [14] Projects in clean energy can empower communities, boost economic growth, establish jobs, while continuing to protect the health of individuals and the environment of Maryland. [15]

Thank you for your consideration of this important legislation.

We respectfully urge a favorable report.

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Sources and Notes:

[1] *In plastic chemical recycling, “feedstock” refers to solid plastic waste which is a raw material used to make a product in an industrial process. What is feedstock in plastic chemical conversion process?*

[2] *Chemical recycling can be divided into three general processes:*

1. *Conversion (sometimes referred to as “plastics-to-fuel”) turns the polymers in plastic waste into smaller molecules that can be turned into fuel or used as feedstock for the creation of new products. Conversion is carried out via one of two main methods:*
 - *Pyrolysis subjects plastic waste to extreme heat in the absence of oxygen to create a synthetic crude oil that can be refined into diesel fuel, gasoline and other products.*
 - *Gasification uses extreme heat to convert plastic waste to synthesis gas: a fuel mixture mainly composed of hydrogen and carbon monoxide, which can then be turned into other fuels or chemicals, such as ethanol and methanol.*
2. *Decomposition uses either heat or chemicals to break down polymers in plastic into monomers to produce new plastics. Chemical decomposition uses powerful solvents to do this. Some decomposition technologies use enzymes.*
3. *Purification uses strong solvents to break plastic down into its chemical components and separate polymers from additives or contaminants. Unlike other types of chemical recycling, purification leaves the polymers themselves intact.*

“Chemical recycling”: What you need to know.

[3] What Are The Differences Between Pyrolysis And Gasification? Key Insights for Energy Conversion - Kintek Solution

[4] Pyrolysis vs Hydrolysis - What's the difference? | WikiDiff

[5] Biodiesel production with immobilized lipase: A review - ScienceDirect

[6] “Chemical Recycling” Isn’t Actually Recycling.

[7] European Union Directive 2008/98/EC. Ameripen, Packaging Materials Management Definitions: “The Bridge to Circularity: Putting the New Plastics Economy into Practice in the U.S. Recycling Partnership,” Stephanie Kersten-Johnston, October 2019, https://recyclingpartnership.org/wp-content/uploads/dlm_uploads/2019/10/BridgetoCircularity_10.28.19-1.pdf.

[8] Recycling Lies: “Chemical Recycling” of Plastic Is Just Greenwashing Incineration

[9] Americans Are Concerned about “Chemical Recycling” - Oceana USA

[10] EPA, “BR Facility Summary Report—Agilyx,” 2019, https://enviro.epa.gov/enviro/brs_report_v2.get_data?hand_id=ORQ000029621&rep_year=2019&naic_code=&naic_code_desc=&yvalue=2019&mopt=0&mmopt=&wst_search=0&keyword1=&keyword2=&keyword3=&rvalue1=&rvalue2=&rvalue3=&cvalue1=&cvalue2=&cvalue3=.

[11] Toxicity, mechanism and health effects of some heavy metals - PMC

[12] Toxic Mechanisms of Five Heavy Metals: Mercury, Lead, Chromium, Cadmium, and Arsenic - PMC

[13] Beyond Plastics, NYS Budget testimony, J Enck, Jan 2025.docx

[14] Making Maryland a Leader in Clean Energy and the Greenest State in the Country | MD Priorities

[15] Maryland Clean Energy Center (MCEC)