HB0796 Recycling - Prohibition on the Chemical Conversion of Plastic

Testimony of Claudia Davis, Field Representative for Oceana in Maryland

Thank you for the opportunity to testify in support of HB 796. My name is Claudia Davis, and I am the Field Representative for Oceana in Maryland. Oceana is the largest international advocacy organization dedicated solely to ocean conservation. With over 15,000 supporters across Maryland, we are working to advance science-based policies that will protect and restore the ocean.

As an ocean conservation organization, we recognize that urgent action is needed to stop the flood of plastic into our waterways, and we also recognize that these actions should be scientifically sound and should not pollute our environment and our communities in new toxic ways.

Chemical recycling, also referred to in HB 796 as pyrolysis, hydropyrolysis, methanolysis, gasification, or enzymatic breakdown, is often presented by the plastics industry as a solution to the plastic pollution crisis. The reality is that chemical recycling is a dirty process that uses heat or chemicals to turn plastic waste into fuel, chemicals, or more plastic while creating toxic emissions and other pollution.

Chemical recycling technologies are not efficiently recycling plastic. A U.S. Department of Energy study found only between 0.1 and 6 percent of the plastic entering these plants was recycled into new plastic.[1] To add to the inefficiency, chemical recycling uses more energy and produces more greenhouse gas emissions than mechanical recycling or even virgin plastic production.[2] [3] The technology is also expensive, and the "recycled" product cannot compete with the cost of virgin plastic.[4] For example, one 2017 analysis

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[1] Sharp, Renee, et al. " More Recycling Lies: What the plastics industry isn't telling you about "chemical recycling" " *NRDC* March 2025. https://www.nrdc.org/sites/default/files/2025-03/More_Recycling_Lies_IB_25-02-A_07_locked.pdf

[2] Hann S and Connnock T (2020) Chemical Recycling: State of Play. ChemTrust. 74p.
IPEN, SCP/RAC, UNEP and BRS (2020) Plastic's toxic additives and the circular economy. Stockholm, Sweden: IPEN. 55p.

[3] Tabrizi S, Rollinson AN, Hoffman M and Favoino E (2020)) Understanding the Environmental Impacts of Chemical Recycling - ten concerns with existing life cycle assessments. Zero Waste Europe.

[4] Roosen M, Mys N, Kusenberg M, et al. (2020) Detailed Analysis of the Composition of Selected Plastic Packaging Waste Products and Its Implications for Mechanical and Thermochemical Recycling. Environ Sci Technol 54: 13282−13293. doi: https://dx.doi.org/10.1021/acs.est.0c03371

found that the gasification and pyrolysis industry has already wasted $2 billion with projects that have closed or were canceled before operations began.[5]

In 2023, Oceana released a nationwide poll conducted by the nonpartisan polling company Ipsos that found that over 70% of the American voters polled are concerned about the negative impacts of chemical recycling and 79% are concerned about the serious health risks associated with toxic chemical emissions from these plants.[6]

Those toxic air pollutants include benzene and formaldehyde, which are known to cause cancer and respiratory problems.[7] Chemical recycling facilities also produce hazardous waste which must then be transported, usually by truck or train, for disposal, expanding the number of communities exposed. These facilities are overwhelmingly sited in low-income and communities of color[8] where residents are already facing disproportionate environmental justice concerns. Our 2023 polling also found that 76% of voters are concerned about that disproportionate impact on neighborhoods near chemical recycling plants.[9]

Chemical recycling distracts from the solution to the growing plastic pollution crisis. The real solution is reducing the production and use of unnecessary single-use plastics.

In summary, HB 796 is a commonsense piece of legislation that protects Maryland's communities and environment from a polluting industry. We hope the committee agrees with our favorable testimony.

Thank you for your time.

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[5] Tangri N and Wilson A (2017) Waste Gasification & Pyrolysis: High Risk, Low Yield Processes for Waste Management. Global Alliance for Incinerator Alternatives.

[6] https://usa.oceana.org/americans-are-concerned-about-chemical-recycling/

[7] Zimmermann L, Dierkes G, Ternes TA, Völker C and Wagner M (2019) Benchmarking the in Vitro Toxicity and Chemical Composition of Plastic Consumer Products. *Environmental Science & Technology* : acs.est.9b02293. doi: 10.1021/acs.est.9b02293

[8] NRDC: More Recycling Lies - What the plastics industry isn't telling you about "chemical recycling" (PDF) Table 8

[9] https://usa.oceana.org/americans-are-concerned-about-chemical-recycling/