



Testimony on: HB0796 Recycling - Prohibition on the Chemical Conversion of Plastic
Committee: Environment and Transportation
Submitting: Dave Arndt, Co-Chair
Position: Favorable
Hearing Date: February 25, 2026

Dear Chair Korman and Committee Members:

Thank you for allowing our testimony today in support of HB0796, Recycling - Prohibition on the Chemical Conversion of Plastic. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of 32 grassroots and professional organizations focused on climate justice, urges you to vote favorably on HB0796.

Around the world, companies are drawing up plans for “pyrolysis” plants, promising relief from the crushing problem of plastic pollution. Pyrolysis is basically thermal decomposition or the process of heating organic materials like plastic to high temperatures in the absence of oxygen, causing large molecules to break down into smaller ones without burning. The result is simpler products like bio-oil and combustible gases. Small pyrolysis startups and demonstration projects are joining with large companies, including petroleum and chemical giants. Chevron Phillips was recently awarded a patent for its proprietary pyrolysis process, and ExxonMobil has a plant in Texas which the company claims will recycle 500,000 tons of plastic waste annually by 2026.

The majority of pyrolysis output is a gas that is burned-off or incinerated, with the toxic discharge being released to the local environment. Pyrolysis also creates an oil which can be further refined and sold as fuel. Finally, it produces a toxic char that is sent to a landfill.

An analysis by the Mindereroo Foundation, an Australia-based philanthropic organization focused on the environment, calculated that of the roughly 2 million tons of advanced recycling capacity scheduled to come online over the next five years, less than half a million tons of this material will actually be recycled back into plastic products. The rest of the output is destined to power airplanes, trucks, and other heavy transportation. This is not recycling. The benefit of recycling comes when you return materials to the production cycle, which reduces the demand for virgin resources. If you take “recycled” plastic and burn it as fuel, you’re not feeding it back into plastic production. To keep making new plastic, you have to keep extracting fossil fuel.

Even worse, the chemical conversion in pyrolysis is actually an incineration process, which has the same or greater pollution issues as other incinerators. The incineration process will produce deadly compounds, and fires, explosions, accidents and leaks can happen. Unfortunately, we all have seen that time and time again monitoring or self-regulation do not work. There are too

many compounds to monitor and no way to know what is being emitted and whether it is benign or carcinogenic.

In addition, the feedstock materials going into pyrolysis reactors are “hard to recycle” plastics, e.g., resin identification code 1-7. You might think this is not a big deal, since we handle these plastic products daily. However, making things out of plastics is like playing a game with molecules. The aim is to reorganize them into new shapes without changing color, sticking to the mold, or doing anything that could spoil the finished article, and additives help with these problems. In fact, processing plastics without additives is virtually impossible. Additives come in 19 different categories defined by their purpose and in each category, there may be hundreds of compounds, such as catalysts, lubricants, flame retardants and stabilizers, and most are added at the request of customers.

Plastics included in code 1-7 have been found to have the following constituents which have been documented to be released in incineration emissions: PFAS, bisphenols, phthalates, chlorine, fluorine, lead, cadmium, selenium, chromium, vinyl chloride, benzene, toluene, mercury, arsenic, dioxins, formaldehyde, hexane, and small particulate matter (PM2.5). This is not an all-inclusive list; there may be other compounds released depending on the type of plastic feedstock. Many of these compounds are known carcinogens, while others are known to cause brain development problems. Additionally, we are becoming more aware of the health effects of compounds like PFAS, and EPA is just now putting restrictions on PFAS in drinking water.

Also, new data suggest that black plastic cookware, typically made in China, has recycled plastic from computer circuit boards, making cooking with and recycling them dangerous. Despite companies touting an oxygen-free pyrolysis process, oxygen is a key component of most plastics thus making their flameless oxidizer process by definition an incinerator. Dioxins and furans are unavoidably created in this process. Dioxins are highly toxic and can cause cancer, reproductive and developmental problems, damage the immune system, and can interfere with hormones. Some dioxins and furans are toxic in the parts per trillion range. Unless these compounds are captured, they will be emitted to the environment.

As you can see, chemical conversion of plastic produces toxic waste, it is unsafe for our health and the environment, does not lower the need for virgin plastics and is not recycling. For all of these reasons, we strongly support HB0796 and urge a FAVORABLE report in Committee.

350MoCo

Cedar Lane Unitarian Universalist Church Environmental Justice Ministry

Chesapeake Earth Holders

Chesapeake Physicians for Social Responsibility

Climate Law and Policy Project

Climate Communications Coalition

Climate Parents of Prince George's

Climate Reality Greater Maryland

ClimateXChange
Coming Clean Network, Union of Concerned Scientists
DoTheMostGood Montgomery County
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