CLEAN WATER ACTION

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Chemical Recycling

Don't believe the industry hype. Plastics are toxic through their entire lifecycle and the technologies that the plastic industry misleadingly calls "chemical recycling" or "advanced recycling" are nothing more than incineration in disguise. "Chemical recycling" is a category of different processes used to convert plastic pellets, both virgin plastic and waste plastic, into low-grade fossil fuels or other chemicals by burning, dissolving, or gasifying it. These technologies won't solve the plastic crisis but will create new public health and environmental problems. They are antithetical to our goals of stopping global warming and moving towards zero-waste in Maryland.

So-called "chemical recycling" is not recycling at all

A Natural Resources Defense Council (NRDC) review of currently operating facilities in the US found that most of these so-called "chemical recycling" facilities were not actually recycling any plastic.[1] Rather, the vast majority are partially incinerating plastic waste to produce low-grade oils that are later burned—a practice that is neither recycling nor environmentally sound.

In fact, a study by the Department of Energy's National Renewable Energy Lab (NREL) found that pyrolysis, the most common form of "chemical recycling," is only capable of turning between 0.1 to 6 percent of the plastic waste processed into new plastic.[2] These facilities are simply not capable of making a meaningful impact.

> **"Pyrolysis and gasification—which make up 85 percent of proposed and operating facilities—even came out looking terrible compared with the production of virgin plastic, with NREL finding that 'the economic and environmental metrics of pyrolysis and gasification are currently 10–100 times higher than virgin polymers.' In other words, it would be cheaper and environmentally preferable to make plastic from virgin fossil fuels than to try to use pyrolysis or gasification to turn plastic waste into new plastic products." [3]-Renée Sharp, NRDC**

It is environmentaly harmful

We continue to see flooding worsen in our cities, sea level rise continues to threaten Maryland's coastal communities, summers are hotter, and weather events are more severe. Climate change is here, and it's now. It is critical that our state legislature takes swift action to stop greenhouse gas spewing "chemical recycling" processes from coming to our state, selling themselves as solutions. These processes themselves produce vastly more greenhouse gas emissions than creating new plastic, and the majority of what they produce are low-grade fossil fuels.[3] Allowing this infrastructure to take hold here would be devastating for our climate, dangerous to our communities, and will set us back in our fight against plastic pollution and climate change.

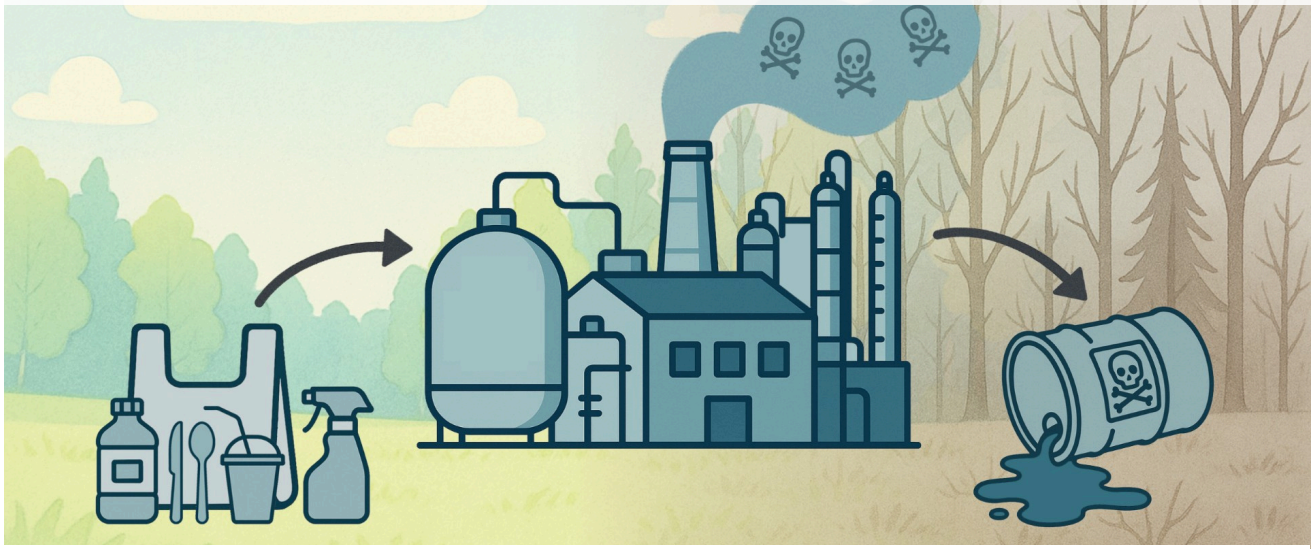
These technologies are toxic and produce hazardous waste

Whether the industry is using pyrolysis, gasification, solvolysis, depolymerization, or similar processes, the fact is that these toxic technologies generate large amounts of hazardous waste and emit hazardous air pollutants. Data from the Environmental Protection Agency shows that between 2021 and 2024 three active "chemical recycling" facilities produced more than 2 million pounds of hazardous waste. The main component of this waste was benzene, a known carcinogen which harms reproduction and the developing fetus, as well as other harmful substances such as lead, cadmium, chromium, and volatile organic compounds which are associated with numerous other severe illnesses and health impacts. These facilities then shipped that waste offsite for disposal crossing through 13 different states by truck and train passing through communities endangering every single resident.[2] We have seen in recent years that spills and accidents can, and do, happen because of facilities like these and we cannot afford to increase these risks in Maryland.

Worsening the Plastic Crisis

The industries that profit off the plastic pollution crisis will not be the ones to fix it. In reality, the plastic industry has known since the 1970's that recycling would never work, despite spending millions of dollars to convince Americans that recycling would be able to manage our plastic waste with no problem.[3] Even more so than other recycling, "chemical recycling" simply is not up to that task. At best it is a failed and highly polluting technology, and at worst it is a ploy to greenwash the plastic industry, compete for green subsidies, and a dishonest means to pave the way to justify increased plastic production.

These processes are expensive, toxic, dangerous, and catastrophic for the climate. Do not be fooled by yet another industry attempt to tout a false solution to plastic pollution.



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