



February 29, 2024

To: House Committee on Environment and Natural Resources

Re: **H7357 – High Heat Waste Facility Act**

Position: **SUPPORT**

Dear Chairperson Bennett and Honorable Members of the Committee,

Clean Water Action, and its 20,000 Rhode Island members, strongly supports H7357, which would prohibit high heat processing of waste in the state.

Processes such as gasification, pyrolysis, hydrolysis, solvolysis, depolymerization are each unique. But they have several things in common, including that the petrochemical industry is currently working throughout the country to sell these risky technologies as a solution to the growing problem of plastic waste. The petrochemical industry is also currently working to redefine terms like “incineration” and “waste” to exclude these processes in effort to side step requirements of the federal Clean Air Act meant to protect communities from hazardous waste.

The Clean Air Act requires strict emission limits, monitoring and reporting requirements, and permitting requirements *for only two kinds of pollution sources*: “incinerators” and “major sources” of hazardous air pollutants. Pyrolysis units are not classified as “major sources” of hazardous air pollutants because the quantities of hazardous air pollutants they release do not reach the Clean Air Act threshold amounts of 10 tons per year of any one hazardous air pollutant or 25 tons of combined HAPs. Thus, *the only way to regulate pyrolysis incinerators under the CAA* is via the section 129 incinerator standards. The incinerator rules specify numerical emissions limits for particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide, lead, cadmium, mercury, and dioxins and dibenzofurans. These rules apply to ANY size of solid waste incinerators given the deadly nature of the dioxins, heavy metals, and other pollutants from these facilities.

On the whole, plastics recycling has been an abysmal failure. Nationwide, we recycle less than 10% of all plastic produced<sup>1</sup>. The petrochemical industry and plastics companies have known this for decades, but have still worked hard to convince the public and decision-makers that we can somehow recycle our way out of the growing plastics crisis. That is not happening. Now, in an effort to avoid real solutions to the plastic crisis – such as source reduction, which means making less plastic – the petrochemical lobby is trying to convince Congress and state legislatures that they have a new solution to the problem: so-called “chemical recycling.” But much like the “chasing arrows” resin codes on plastics, meant to make the

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<sup>1</sup> U.S. Environmental Protection Agency (hereinafter EPA), “Plastics: Material-Specific Data,” September 12, 2017, <https://www.epa.gov/facts-and-figures-aboutmaterials-waste-and-recycling/plastics-material-specific-data>.

public *think* all of the single-use plastics they buy are somehow being recycled, so-called “chemical recycling” is, first and foremost, a public relations strategy meant to distract from better solutions.

The petrochemical lobby would have you believe that processes like pyrolysis and gasification are technically not incineration because incineration requires the presence of oxygen and these processes take place in the absence of oxygen. That is not true. All plastics contain some level of oxygen. (As little as 2% in virgin polyethylene and up to 23% in polyurethane.) Plastics pyrolysis is NOT an “oxygen free” process, but rather a process where levels of oxygen are relatively low.

The petrochemical lobby would have you believe that so-called “chemical recycling” facilities are recycling plastic. In most cases, that is not true. Most of the facilities that have been built are actually “plastics to fuels” operations that melt plastics and extract low-grade liquid fossil fuels to be burned elsewhere.

The petrochemical lobby would have you believe that their “feedstock” for these facilities is not “solid waste” (and therefore not “waste incineration.”) U.S. EPA has long recognized that pyrolysis facilities are incinerators, and in fact the agency specifically called them out 30 years ago in the Clean Air Act: “Municipal solid waste combustion includes the direct combustion of MSW or the combustion of MSW gases from pyrolysis or gasification.” (See 60 Fed. Reg. 65.387, 65.391, Federal Register: Standards of Performance for Municipal Waste Combustors. 1995, December 19).

Plastics can contain thousands of different toxic chemicals which are transferred into the air as emissions or into the solid waste byproducts of plastic-to-fuel operations, and these facilities place a heavy toxic burden on communities near these sites, and/or near the sites where the byproducts of these processes are ultimately disposed of or burned. One such “chemical recycling” facility in Washington, Agilyx, produced nearly 500,000 pounds of hazardous waste in one year alone, which was sent to six different locations in the U.S. for eventual disposal or incineration.<sup>23</sup>

Many of these “chemical recycling” facilities have been economic boondoggles that either never actually came to fruition, or closed quickly due to lack of consistent, reliable “feedstock or because they were uneconomical. Traditional mechanical recycling is much cheaper, and it’s even challenging to make that economically feasible. Chemical recycling is much more energy intensive and technically complex, and these facilities are often only possible with government assistance or some other financial support to make the economics work. Simply put: this is not a viable solution to our plastic problem.

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<sup>2</sup> 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=](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=)

<sup>3</sup> <https://www.nrdc.org/sites/default/files/chemical-recycling-plastic-greenwashing-incineration-fs.pdf>

Plastics are a lifeline for the fossil fuel industry at a time when governments around the world are working to phase out the burning of fossil fuels, and plastic-to-fuel or “chemical recycling” technologies are nothing more than an industry shell game. By promoting so-called “chemical recycling,” the plastics industry is greenwashing old incineration technologies like pyrolysis and gasification as a panacea to the plastic pollution crisis.

The best way to deal with the plastic pollution crisis is to stop making so much plastic waste to begin with. It is not surprising that the petrochemical industry is opposed to solutions that actually result in less of their products being produced. But, good solid waste policy should always be guided by the “three R’s”: reduce, reuse and recycle, in that order of importance. Specific options include:

- Banning certain hard-to-recycle problematic plastic items. (The General Assembly has already recognized the value of this approach by banning single-use plastic bags and polystyrene food containers.)
- Banning particularly harmful types of plastic packaging, including PVC and polystyrene (PS.) PVC and PS are not recycled (almost anywhere), are toxic to produce, and should be phased out of packaging. (Many large U.S. and global companies have already committed to phase out PVC and PS from packaging as part of the U.S. Plastics Pact.)
- Source separation for particular plastics, such as via a recycling refund system for beverage containers (aka a “bottle bill.) Plastic beverage containers collected via recycling refund systems are effectively mechanically recycled back into new beverage containers.
- Extended producer responsibility programs for packaging (see H7023, Rep. Bennett) that require producers to redesign packaging to reduce unnecessary waste.
- Mandating a transition to non-toxic reuse and refill systems.

Clean Water Action urges this committee to pass this legislation.

Sincerely,

A handwritten signature in black ink, appearing to read "Jed Thorp". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Jed Thorp  
Rhode Island State Director, Clean Water Action