June 13, 2022

The Honorable Chellie Pingree
Chair
House Appropriations Subcommittee on the
Interior, Environment, and Related Agencies
Washington, DC 20515

The Honorable David Joyce
Ranking Member
House Appropriations Subcommittee on the
Interior, Environment, and Related Agencies
Washington, DC 20515

The Honorable Jeffrey Merkley
Chair
Senate Appropriations Subcommittee on the
Interior, Environment, and Related Agencies
Washington, DC 20510

The Honorable Lisa Murkowski
Ranking Member
Senate Appropriations Subcommittee on the
Interior, Environment, and Related Agencies
Washington, DC 20510

Dear Chairwoman Pingree & Ranking Member Joyce and Chairman Merkley & Ranking Member Murkowski:

The American Chemistry Council ("ACC") would like to provide additional context for a recent letter submitted to the House Appropriations Subcommittee on Interior, Environment and Related Agencies on May 2, 2022. ACC, acting on behalf of its members, represents a diverse set of companies engaged in all aspects of the U.S. business of chemistry. The business of chemistry is a $553 billion enterprise that provides approximately 542,000 high-paying jobs, drives innovations enabling a more sustainable future, and is helping solve the biggest challenges facing our country and the world. This includes our global efforts to address marine debris, reduce plastic waste, and work toward making all U.S. plastic packaging recyclable or recoverable by 2030, and reused, recycled, or recovered by 2040. We believe some of the statements offered to the Subcommittee warrant clarifications and additional context.

Chemical recycling, commonly known as "advanced recycling," encompasses several manufacturing processes, such as pyrolysis, gasification, depolymerization, and solvolysis, which support a more circular economy by transforming used plastics into new virgin-equivalent plastics and other high-quality products. The following language was recommended for inclusion in the FY 2023 Interior, Environment & Related Agencies appropriations bill, which ACC strongly opposes:

> *Regulatory treatment of chemical recycling technologies to ensure clean and healthy air for all.- The Committee is concerned about the growth of chemical recycling technologies, specifically pyrolysis and gasification units, for the treatment of plastic waste. These chemical recycling technologies do not result in the recovery of plastic materials to advance a circular economy and the facilities contribute to climate change and impose disproportionate health burdens on the communities where they are located. The Committee directs the Agency to consider the emissions, disproportionate impacts, and lack of circularity in its ongoing rulemaking on the regulatory treatment of gasification and pyrolysis units and directs the Agency to maintain regulating these technologies as "municipal waste combustion units" under CAA Section 129.*

While ACC welcomes EPA's efforts to develop a consistent approach to the regulation of pyrolysis and gasification, we would like to offer the clarifying points below.

Advanced Recycling Is Not Incineration

First and foremost, it is important to note that pyrolysis and gasification are not "incineration." These processes *do not* involve the "combustion" of "solid waste" under applicable law nor do they burn plastics for energy. Combustion involves burning hydrocarbons in the presence of excess oxygen to produce energy. According to the American Society of Mechanical Engineers, pyrolysis units are distinctly different from municipal waste combustion units. Pyrolysis occurs in the absence of oxygen – the pyrolysis process goes to extensive lengths to keep oxygen out of the reaction to produce raw materials for other manufactured products. Likewise, the amount of oxygen used in a gasification process is minimal and not enough to be considered combustion. In addition, the plastics used by advanced recyclers are raw materials not "solid waste," nor are advanced recycling inputs disposed into the environment. Further details on why pyrolysis and gasification do not qualify as incineration of solid waste are available in our comments on EPA's Advance Notice of Proposed Rulemaking on Pyrolysis and Gasification Units.

Secondly, a recent fact sheet by Ocean Conservancy on plastics recycling notes that advanced recycling technologies do not recover plastic material. This is incorrect. Advanced recycling technologies convert used plastics into raw material that are used to make valuable chemicals, plastics and other products. In the last few years, as the processes have evolved, there has been a notable shift from the production of transportation fuels to more circular feedstocks used in new products and packaging. Below are some of the many, notable examples in the United States of products made from recycled plastics derived from advanced recycling using third-party certification standards, such as the International Sustainability and Carbon Certification PLUS system:

- Nalgene reusable bottles
- Lander iPhone case
- Mazzucchelli acetate eye frames
- Tupperware lunch & sandwich containers
- Ello Eco reusable water bottle
- LVMH's Dior Lip Gloss packaging
- BodyGuardz phone case
- Wendy's drink cups
- Herbal Essences shampoo-conditioner bottles
- Black+Decker power tools
- AmorePacific's Laneige Water Sleeping Mask
- Warby Parker eyeglass frames
- McDonald's drink cups
- Steelcase Flex Perch stool
- Mattel playsets and toy cars

Environmental Compliance

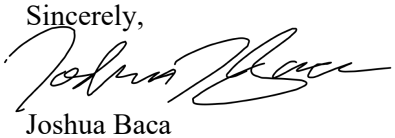
Another important clarification is needed regarding the contention that advanced recycling technologies contribute to climate change and cause harmful health impacts. It is important to note that applicable federal, state and local regulatory requirements for advanced recycling facilities have been established to protect human health and the environment. For any advanced recycling manufacturer to establish operations in the United States, it must obtain permits from environmental regulators and operate in compliance with the Clean Air Act. Benchmarked air emissions from an average-sized advanced recycling facility have been found to be on par with those from other commonly welcomed establishments, such as hospitals and universities, and often are too low to trigger key EPA permitting thresholds, thus not requiring a Title V permit. Advanced recycling operators must also comply with all applicable federal, state and local laws, including but not limited to the Clean Water Act and National Pollutant Discharge Elimination System. Additionally, advanced recycling facilities need to comply with a range of other regulations, depending on the outputs, co-products, and any by-products produced. Advanced recycling operations, just like other common manufacturing and industrial processes, are subject to RCRA regulations.

Contribution to Circularity

Advanced recycling certainly *does* represent a viable, constructive and needed solution to help achieve a more circular economy, despite claims to the contrary. Mechanical (traditional) recycling processes have been successful in recovering materials like PET and HDPE bottles and converting those plastics into durable goods such as carpet, fleece jackets, railroad ties and pallets. While mechanical recycling is well suited to certain plastics, advanced recycling increases the scope of recyclable plastic materials. Advanced recycling can convert harder-to-recycle plastics such as films, pouches, and foams into virgin-quality recycled plastics for use in food, medical and pharmaceutical grade applications. A recent analysis by McKinsey and Company noted that "advanced recycling expands the number and volume of plastics that can be recycled" and that these technologies "can benefit the environment and improve the viability of the plastics recycling value chain."

Lastly, regulating advanced recycling as municipal solid waste combustion would be inconsistent with a strong trend in state regulations. Policymakers in eighteen states have enacted bipartisan legislation to appropriately regulate these facilities as manufacturing operations, better protect human health and the environment, and help recycle more plastics in their communities. Regulating advanced recycling as solid waste incineration could undermine EPA's National Recycling Goal of increasing the U.S. recycling rate to 50% by 2030. America's plastic makers, global brands and policymakers across the country are relying on advanced recycling to support their sustainability goals.

Sincerely,



Joshua Baca
Vice President, Plastics Division
American Chemistry Council