



March 21, 2022

Mr. Dan Allaway
Project Manager
Department of Environmental Quality for Oregon

VIA EMAIL: rethinkrecycling@deq.oregon.gov

RE: Oregon Plastic Pollution and Recycling Modernization Act (Senate Bill 582)
Polypropylene – Material Technical Information Submission

Dear Mr. Allaway,

Thank you for the opportunity to provide input to the Oregon Department of Environmental Quality's (DEQ)'s request for technical information to be considered as part of the DEQ's responsibility for developing recommendations for inclusion (or exclusion) of materials from statewide recycling lists to be developed under Section 22 of Oregon's Plastic Pollution and Recycling Modernization Act (Senate Bill 582) ("SB 582"). We appreciate DEQ's interest in receiving input on an issue that will have significant impact on Oregon's efforts to develop a sustainable, meaningful recycling program designed to incentivize innovation, demands accountability, and will address plastic pollution. PureCycle Technologies is a pre-commercial operations company bringing innovative, disruptive polypropylene ("PP") recycling technology that will enable manufacturers to fabricate products using 100% recycled material.

PureCycle's patented solvent-based plastic purification process removes additives, colors, and odors from waste plastic resulting in an ultra-pure recycled (UPR) resin with nearly all the same applications as virgin plastic. Our UPR resin has a significantly broader application than mechanically recycled PP and does not require a chemical reaction to repurpose the waste plastic (as does pyrolysis and other chemical recycling processes). No one else is currently bringing a technology like ours to the market and we believe it will enable companies to design PP products that can be part of a circular economy.

We believe PP should be among the materials the DEQ recommends to the Environmental Quality Commission because market demand is solid and growing and our PP recycling technology will result in a substantially lower impact on the environment, including less greenhouse gas generation, than virgin production. PureCycle's commissioned independent, third party life cycle analysis ("LCA") of our UPR resin production process shows definite savings in both GHG emissions and fossil fuel consumption in comparison to prime PP. Currently we believe approximately 17 billion pounds of PP are produced today and based on our estimates we believe approximately 2.3 billion a year can be recycled and hope to create a market for half that. For example, PureCycle: has an anchor customer with Procter & Gamble ("P&G"), who invented this technology; has preprocessing that sorts and captures the other resins for resale, as opposed to ground and sorted in a wash process deeming them unrecoverable; has technology that can make a food grade recycled pellet; is interested in all forms of PP, not just packaging, including items like pill vials, hangers, super sacks and automotive residue – bringing new value opportunity to these post-use items.



After licensing the PP purification technology from P&G 2012, PureCycle continued its development and has spent the last four years proving the technology out through a pilot plant we built in 2019. After a series of raising capital, we are now developing a billion pounds of domestic capacity in the U.S. over the next three years, starting with our first commercial-scale operation in Ironton, Ohio. This plant is slated to be operational by the fourth quarter this year with over 100 million pounds of capacity. A second plant with two purification lines is breaking ground March 22, 2022, in Augusta, Georgia with an estimated 260 million pounds per year capacity. We have plans to keep building lines and plants as committed to our customers and investors through 2025 until we reach our billion pounds recycling capacity. Locations for these facilities, including locations in the western U.S., will be dependent on availability of supply. Our business model is extremely dependent on a growing PP recycling infrastructure, not a declining one.

Any efforts to decrease PP waste collection could undermine key domestic recycling technology innovation investments, like ours, in the U.S. and actually result in lower recycling rates. Polypropylene is the most versatile resin produced – with applications in almost every format of packaging, durable goods and fibers and fabrics. The fact it has not had a large stream of natural or clear consistent monotype packaging like PET has with beverage bottles as well HDPE with milk, water and juice bottles, has inhibited the growth of PP recycling until now. PureCycle's technology takes the colorants and additives out without breaking the molecular chain of the polymer. In other words, our technology allows the packaging industry to use our 100% recycled UPR resin nearly all the same products as virgin PP – regardless of whether the waste PP was from carpet, a car or a package.

PureCycle is committed to being a significant resource for recycled PP resin, but we need post-use, waste PP to produce UPR resin. To reach our billion pound per year goal, we need to procure approximately 2.5 times more waste PP from across the U.S. than what is currently being collected in MRF's (multi recovery facility) today. We need your help, to it. We would welcome the opportunity to discuss with the Oregon DEQ staff and the Environmental Quality Commission how PureCycle can be a part of, and support, Oregon's efforts to ensure an efficient and effective PP and other plastic recycling program. If you have any questions regarding our technology or expansions, I will be happy to facilitate a call through The Recycling Partnership and ourselves.

Sincerely,

Tamsin Ettefagh
Chief Sustainability Officer