

**Testimony to the Senate Committee on Energy & Environment
on Senate Bill 405**

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**Jamie Pang , Environmental Health Program Director
Oregon Environmental Council**

Founded in 1968, the Oregon Environmental Council (OEC) is a nonprofit, nonpartisan, membership-based organization. We advance innovative, collaborative and equitable solutions to Oregon's environmental challenges for today and future generations.

Dear Chair Sollman, Vice-Chair Findley, and Committee Members–

Oregon Environmental Council (OEC) is submitting written support for SB 405, which would prohibit the sale of new clothes washing machines unless they are equipped with a built-in microfiber filtration system or are sold with a compatible, in-line microfiber filtration system. We are a nonpartisan, environmental nonprofit that works at the nexus of human health and the environment.

The Environmental Health and Wildlife Impacts:

SB 405 would allow us to wash our clothing and cloth household items while limiting the microplastics discharged into our environment. Currently, washing machines have an average of up to 78-80% microfiber capture by weight, whereas filters can capture 87% of microfibers.¹ The lack of microfiber capture leads to microplastics entering our wastewater and ending up in our waterways and environment.² Microplastics are harmful to wildlife and human health, both of which are currently exposed to this habitual pollution.

Plastic pollution is found in the highest concentrations in some parts of the Arctic ocean bottom, and up to 12.7 million metric tons of plastic waste are dumped into the seas annually.³ This has massive implications for animals living in these environments, such as Arctic birds, polar bears, and foxes.⁴

The Human Health Impacts:

But microplastic pollution is not limited to our oceans. Microplastics in soil and freshwater are estimated to be up to 23 times higher than marine microplastic

¹ <https://www.frontiersin.org/articles/10.3389/fmars.2021.777865/full>

² <https://www.nytimes.com/wirecutter/blog/reduce-laundry-microfiber-pollution/>

³ <https://www.nationalgeographic.com/science/article/remote-arctic-contains-more-plastic-than-most-places-on-earth>

⁴ *Id.*

pollution, causing these particles to enter our water supplies.⁵ They have been found in tap water, and release chemicals such as phthalates and BPA at the decomposition stage, potentially disrupting the endocrine and immune systems of people and pets.⁶ Additionally, microplastics can cause inflammation, traverse cellular barriers and cross the blood-brain barrier and the placenta.⁷ Microplastics have even been found in the placentas of unborn babies- from nanoparticles carried through the bloodstream.⁸

Conclusion:

From our oceans to our kids, addressing microplastic pollution is of the utmost importance. Reducing microplastic waste, much of which is from garment waste, would not only prevent further harm to the environment but also to human health. Requiring a microfiber filtration system in new washing machines is an important way to address this growing concern.

We urge the Senate Committee On Energy and Environment to support this bill.

Sincerely,

Jamie Pang
Environmental Health Program Director
Oregon Environmental Council
JamieP@OECONline.org

⁵ <https://www.unep.org/news-and-stories/story/plastic-planet-how-tiny-plastic-particles-are-polluting-our-soil>

⁶ *Id.*

⁷ *Id.*

⁸ <https://www.theguardian.com/environment/2020/dec/22/microplastics-revealed-in-placentas-unborn-babies>