



April 4, 2017

The Honorable Assembly Member Stone
P.O. Box 942849
Sacramento, CA 94249-0029

AB 319 (Stone) Bottle Cap Recycling ----Support

Dear Assembly Member Stone:

The undersigned organizations thank you for introducing AB 319- a bill that requires all single use plastic beverage containers sold in California to have the bottle caps tethered to the bottle or the bottle designed such that the caps are not separable from the bottle. This bill is important because it will reduce street litter and plastics entering inland and coastal waters.

Unleashed bottle caps litter our communities and coast and contribute to the increasing plastic pollution problem in inland and ocean waters. According to a recent report by the World Economic Forum and Ellen MacArthur Foundation, if plastic litter reaching the world's oceans is unabated, by 2050 there will be more plastic in the ocean than fish (by mass).ⁱ Bottle caps contribute to the massive and increasing release of plastics from land-based sources. Bottle caps and lids are the #3 item found on California beaches during Coastal Cleanup Day.ⁱⁱ

Bottle caps kill seabirds either through ingestion that causes starvation or injury, when sharp edges of degraded plastic puncture internal organs.ⁱⁱⁱ The Laysan Albatross, a California species, is a poster child for this problem – but 90% of all seabird species are impacted.^{iv}

Plastic Debris threatens Human Health. Recent studies by the San Francisco Estuary Institute indicate that littered consumer plastics contribute to the increasing load of microplastics in the San Francisco Bay.^v This likely happens in all waterbodies that receive urban runoff. Research demonstrates that plastic debris attracts pollutants from seawater, particularly persistent organic pollutants like PCBs and PAHs, absorbs them and concentrates them on the surface. Research also shows that some species of fish sold in California markets have ingested plastic debris.^{vi} Therefore, plastics are polluting seafood consumed by people.

Taxpayers are footing the bill. All California municipalities must eliminate the discharge of trash to storm drains by 2022.^{vii} The enormous costs associated with trash cleanup and capture are being borne by taxpayers.

Recyclers want the plastic and the technology exists to leash the lid. Many recyclers already have the technology to separate the various plastics (caps are typically

polypropylene-PP- and bottles are polyethylene terephthalate-PET) after they are ground.^{viii}
The PP bottle caps have value. Many variations of tethered or integrated caps already exist.^{ix}

Our organizations support AB 319 and thank you for introducing this important measure.

Sincerely,

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Executive Director
California Product Stewardship Council

Wendy Sommer
Executive Director
StopWaste

Cc: Elizabeth MacMillan, Nat. Res. Committee Consultant

ⁱ <https://www.ellenmacarthurfoundation.org/publications/the-new-plastics-economy-rethinking-the-future-of-plastics>

ⁱⁱ Based on 1989-2014 results. <https://www.coastal.ca.gov/publiced/ccd/history.html>. Caps were 9% of the items collected.

ⁱⁱⁱ <http://news.nationalgeographic.com/2015/09/15092-plastic-seabirds-albatross-australia/>

^{iv} Wilcox, Chris et al, *Threat of plastic pollution to seabirds is global, pervasive, and increasing*, Proceedings of National Academy of Sciences of the USA, Vol 112, No 36, 11896-11904.

^v The SF Estuary Institute and Regional Monitoring Program found billions of pieces of micro-plastics in the SF Bay, much of it resulting from breakdown of bottles, bottle caps, and other macro-plastic products. <http://www.sfei.org/projects/microplastic-pollution#sthash.oYf28jjj.TbWQfDQr.dpbs>

^{vi} 67% of the seafood sampled from California vendors had plastic in their guts – Rochman, Chelsea, et al, *Anthropogenic debris in seafood: Plastic debris and fibers from textiles in fish and bivalves sold for human consumption*, *Scientific Reports* 5, Article number: 14340 (2015)

^{vii} http://www.waterboards.ca.gov/water_issues/programs/trash_control/

^{viii} <https://www.plasticmakeitpossible.com/plastics-recycling/how-to-recycle/at-home/keep-your-top-on/>
<https://www.inabottle.it/en/news/recycling-plastic-bottles-now-its-better-cap>

^{ix} <http://www.packagingdigest.com/closures/te-sports-closure-opens-with-push-of-button1611> and <https://www.plasticstoday.com/packaging/inside-innovative-avantage-cap/59782755147363>