



3 May, 2021

Submission to the Waste Avoidance and Resource Recovery Amendment (Plastics Reduction) Bill 2021

An Act to amend the Waste Avoidance and Resource Recovery Act 2001 to phase out the use of single-use plastics and certain other products that have a harmful impact on the environment; and for other purposes

Introduction

As co-founder of SO SHIRE (Sustainable Organisations of the Sutherland Shire) with our first focus on a Plastic Free Sutherland Shire, I support the submissions by fellow organisations including Boomerang Alliance (we are one of the 53 NGO allies of the alliance). I wanted to briefly submit on three local issues - **cigarette butts, balloons debris and plastic cotton bud stems**. Our organisation participates in citizen science clean ups where we sort and count the specific litter and debris items to identify and quantify but to also determine the source and work on solutions to stop these items polluting our local beaches and other environments that we like to live in, work in and play in, and over the past two years specifically we have noted the constant existence of balloon debris from helium balloon releases and excessive water balloon toys (We find on **average 5 balloons per 1 kilometre every week on our local beach**) and at 6 main sites we collect data we have noted the **high quantity of cotton bud/tip stems coming from our local sewerage systems - finding hundreds of cotton bud entire stems and pieces is not unusual, it is a regular occurrence**. People are flushing the plastic stems down the toilet, and our Sydney Water sewerage systems are not advanced even in 2021 to filter the hundreds of these items. These are not coming from just from "overflows", it is regular occurrence as they escape through the 6mm primary filtration systems, where the majority of Sydney sewerage is treated, and thus end up in ocean, and then our beaches. The tertiary treatment plants have 6mm filters as well, and we have discovered 6mm pieces and sticks with indentations indicating the filters may be breaking up the sticks if they line transversely across the filters. Presence of FOG (fat oil and grease) indicate they are from the sewerage system.

Stopping these items being produced in the first place (there are plastic free alternatives, including reusable buds, education and public awareness programs to

stop flushing items down the sewerage system, and updating our sewerage systems are my suggestions - and in the short term time frame.

Cigarette butts are also a serious issue for our local beaches, parks, streets etc. Sutherland Shire's beaches, rivers, parks, roads and drains are direct gateways to the ocean. It is imperative that the use and supply of single use plastics (such as coffee cups, straws, plastic bags, cutlery, water bottles and takeaway containers) in local activities, schools and canteens, businesses and households is greatly reduced to stop them entering our waterways and landfill. Reducing waste and energy consumption at home, work or play not only reduces ocean pollution and climate emissions but also reduces costs of living and the effect on our health and the community's wellbeing. Education is the key, as knowledge leads to understanding. We have data we can supply to the Committee.

Some citizen science clean up statistics to consider

Although I weigh the rubbish I pick up on designated clean ups, the daily small collections of the litter and debris I collect is quickly disposed of in the nearest bin, with only the specific source reduction item taken home to count (such as all the cotton tip stems are taken home to enter into our citizen science study and kept for evidence). And considering the most common items (cigarette butts, soft plastics, cotton bud stems, microplastics) are very light in weight, it is best to realise the quantity collected and counted for source reduction plans - not the weight! A whole bag of soft plastics does not even weigh a kilogram! And then consider that after picking up the items, we then count them**so we actually have “picked” up each item twice - once off the ground and second to count!**

For some specific statistics, **I have picked up over 14,052 pieces individually per year (that is my 2020 count)!** Best way to understand how all that starts to add up quickly, if you pick up 10 pieces a day, and over 200 pieces per weekend, but that does not include the amount picked up as part of regular group volunteer clean ups! **I pick up 10,000+ cigarette butts a year - in the month of February 2021 alone I picked up 2200 butts!** I am part of small group of volunteers that have picked up and counted over 4201 cotton bud plastic stems (whole stems) from 6 main beach sites since 2019, and once March and April 2021 data is tallied that number will be way over **5000 whole cotton tip stems**. The location, quantity and quality of these cotton plastic stems on our beach sites tells us a lot on the source from local sewerage systems - for example we found over **500 cotton tip stem pieces that show they have been cut up by the sewerage filters, and those with fog (fat oil and grease) deposits that tells us they have been in the sewerage system**. That will bring us to a total over 5000 whole stems, plus over 500 stem pieces. Local solutions – based on the three pillars of public education of not using the toilet as a

bin, the ban on manufacturing and selling single use plastic cotton buds, and improvement in Sydney's sewerage systems.

For larger clean ups that are a group effort, we weigh the amount we have collected, but tend to only have time or the safety to count a sample bag or two. When we have over 100 public participants, we have enough volunteers to help sort and count the kilograms collected, but with our smaller data clean ups and daily clean ups, we have to concentrate on counting specific target litter items. So the "amount" I have picked up is only a small estimate in reality as we only count the items we actually sort and tally into specific item categories (such as PET bottles, cans, lids, straws, etc). For a specific example, for the 30th anniversary of Clean Up Australia Day (March 2019) 7 local volunteers from our organisation cleaned up a special wetland site of Sutherland Shire - Towra International Wetlands is a significant site for our native coastal vegetation, wildlife and migratory animals including wading and shorebirds displaced by Sydney's airport runways and who now rely on this last remnant estuarine wetland ecosystem. Why are wetlands (mangroves, salt marsh, Sea grasses habitats) important estuarine ecosystems for humans? They are natural filtering systems, physical protection for our coasts, carbon sinks and oxygen manufacturers, and homes, feeding and nursery habitats for native wildlife such as for the sea food we like to eat or that form part of the larger food web. To give you an idea of what data we get on a clean-up like that, **183 kilograms, 27+ bags, 2.5 hours, 8 people (including one NPWS Ranger)**. And the types of items were (Not by weight but by quantity) mostly polystyrene pieces, PET bottles and bottle lids, and sadly so much broken up and micro plastic pieces caused by the degradation due to the sun, salt, water and heat over time (so many large objects just crumbled when we picked them up).

Conclusion

In summary, the following single-use plastic items are a major and destructive source of ocean plastic pollution and have viable alternatives. As a priority, NSW should phase out;

- Single-use plastic bags, including barrier bags and heavy-weight plastic bags
- Plastic straws and stirrers
- Plastic utensils/cutlery
- Plastic plates and bowls
- Polystyrene food ware
- Oxo-degradable plastic products
- Plastic lined coffee cups and lids
- Plastic containers

The following items should be primary, not secondarily phased out:

- **Cigarette butts**; approximately 2.4 billion cigarette butts are littered in NSW each year. NSW should explore a design standard that prevents the use of single-use plastic filters in cigarettes or a product stewardship scheme that ensures producer responsibility for cigarette butt litter.
- **Balloons**; balloon pieces are one of the top plastics posing an entanglement risk to marine life. Currently the release of more than 19 helium balloons is illegal in NSW; this should be changed to ILLEGAL to release ANY number of helium balloons.
- **Other problematic packaging**; NSW should also address other plastics that contribute to litter and waste, including sauce and condiment containers, plastic food decorations, cotton buds, personal care products with microbeads, hand wipes and plastic food wrapping.

Reusable systems need to be implemented state-wide, supported and incentivised including return and swap cup and container systems.



WHAT COULD BE CAUSING
THESE CUTS ON THE
COTTON TIPS ?

Are the 6mm filters causing this to stems when transverse

FOG (FAT OIL GREASE)

**EVIDENCE THEY ARE FROM
SEWERAGE NOT STORM WATER
OR LITTER**



COTTON TIP PIECES







Lollipop - one hole, cotton tip - has ridges on ends, long white - part of lobster tag



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