

Biodegradable Filters: a Health and Environmental Hazard for the Secretariat of the Second Session of the Intergovernmental Negotiating Committee (INC-2)



Name of Observer Organization	Action on Smoking and Health
Contact Person	Chris Bostic, Policy Director
	BosticC@ash.org info@ash.org

CONTEXT

In light of regulatory developments, particularly in the European Union, the tobacco industry is preparing for a ban on plastic filters for its products. The filter was invented by the tobacco industry and has many advantages for manufacturers. First, filters were designed to address smokers' concerns about the health risks of their consumption. Second, filters keep tobacco away from the consumer's mouth, thus improving the smoking experience for the smoker. Finally, the filter, less expensive than tobacco, reduces the weight of the products, and thus lowers production costs[i].

Therefore, the upcoming ban on plastic filters is a threat to the profitability of the tobacco industry. From this point of view, manufacturers are seeking to postpone the measure as much as possible, in order to find alternatives to the plastic filter, which is an adjuvant to the maintenance of tobacco consumption. For these reasons, companies involved in biodegradable filters are linked to the tobacco industry, as is the case with Greenbutts[ii].

THE FILTER, AN ENVIRONMENTAL AND HEALTH HAZARD

a. A Major Plastic Pollutant

Every year, an estimated 4500 billion cigarette butts end up in nature. These butts are mainly made of a filter, itself mostly composed of cellulose acetate, and take between 10 and 15 years to decompose. As a result, filters are the source of the most important plastic pollution in the world: about 40% of the waste collected in the Mediterranean Sea are cigarette butts, and 30% on the coasts of the United States.

b. A highly toxic waste, whatever its composition.

Whether it is made of plastic or not, the filter becomes a particularly toxic waste after consumption. As it decomposes, the filter releases thousands of extremely harmful chemicals, such as heavy metals and radioactive substances (polonium)[iii]. Given its toxicity, no viable treatment and recycling solution exists for these products. Thus, the only advantage that this new generation of filters could have, namely an environmental interest, is non-existent.

c. No health justification.

The lack of health benefit of the filter is now a fact widely documented by the scientific literature, and a fact known by the tobacco industry for at least fifty years. The filter leads the smoker to take deeper and more prolonged puffs, increasing the addictiveness and toxicity of tobacco. Not only the filter does not lead to harm reduction for the smoker, but its widespread use has resulted in an increase in lung adenocarcinoma[iv], a malignant lung tumor responsible for nearly 30% of lung cancers. For this reason, the filter is considered the "most deadly scam in the history of civilization"[v].

d. The filter encourages smoking.

The filter, marketed by the tobacco industry as a harm reduction tool, blurs smokers' perception of the real dangers of smoking to their health. Thus, the filter facilitates smoking initiation (by reducing the pungent and unpleasant nature of the first experience) and discourages quitting. Recent studies on the subject show that cigarettes with filters are still perceived as less dangerous, even by the younger generations[vi].

In summary, the plastic composition of the filters is only one component of the filter problem. If it is important to reduce the amount of cigarette butts thrown away, it is also essential to reduce the consumption and production of these products. The choice to turn to so-called "biodegradable" solutions cannot be considered a viable option: these filters, after consumption, become particularly toxic waste, they have no sanitary justification and blur the real risks incurred for health.

SPECIFIC RISKS RELATED TO THE INTRODUCTION OF "BIODEGRADABLE" FILTERS

a. Increased risks for the environment.

The introduction of filters marketed as "biodegradable" may mislead the consumer into thinking that cigarette butts can be thrown away without any environmental impact, when it has been pointed out above that filters, whether or not they are made of plastic, become highly toxic waste once they have been consumed.

b. A risk of renormalization of smoking.

The introduction of "biodegradable" filters may also help to improve the image of smoking, by suggesting that some tobacco consumption can be environmentally friendly. This risk of renormalization of smoking is all the greater with the younger generations, who are more sensitive to environmental issues. It could also be a potentially formidable marketing argument, as it was the case several decades ago with the introduction of filters or so-called "light" cigarettes, which led to an increase in consumption.

c. A risk of renormalization of the tobacco industry.

Such an approach is likely to reinforce the strategy of the tobacco industry, which seeks to improve its image with consumers and its influence with public decision-makers, through Corporate Social Responsibility (CSR) practices, even though these are prohibited by the WHO Framework Convention on Tobacco Control (FCTC) as well as by the Public Health Code in France. By presenting itself as a responsible actor, the tobacco industry favors a partnership relationship with public authorities, risking to weaken and neutralize tobacco control policies.

d. Biodegradable plastics do not degrade in the natural environment.

Most of the plastics known as biodegradable are not biodegradable under conditions which one finds in the environment but in industrial composting facilities: temperature of more than 50°, a strong rate of moisture, the presence of the adequate micro-organisms. Thus, those filters are designed to only be biodegrade in industrial facilities under very specific environmental conditions that are rarely – if ever – found in the environment, even less so in an aquatic environment[vii].

Thus, the introduction of biodegradable filters appears to be an environmental and health nonsense. Regardless of its composition, the filter does not provide any health benefits and is a source of substantial pollution. From this perspective and considering that waste reduction not only involves processing but also prevention of waste production, banning filters in all their forms is an opportune and indispensable solution in many respects.

Tobacco products without filters are seen as more toxic, and the pungency of tobacco will be reinforced, thus discouraging smoking initiation and encouraging smokers to reduce or stop their consumption. By helping to reduce smoking and its intensity, such a measure will lead to a reduction in the environmental impact of cigarette butts, as well as beneficial effects on public health.

Acknowledgments and Authorship

This brief is prepared by the French Committee on Tobacco Control (CNCT) on behalf of Stop Tobacco Pollution Alliance (STPA).

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