

# Regulating the Use of Plastic Checkout Bags

Background information on laws and bylaws proposing a ban on checkout bags.

The Southeastern PA Group of the Sierra Club supports laws that ban non-biodegradable plastic shopping bags. These bags are typically made of synthetic polyethylene (HDPE & LDPE). These proposed laws do not limit other types of bags, although some communities have also regulated produce bags that are used in a supermarket's vegetable aisle.

Plastic bags are convenient and cheap. However, the environmental expense of plastic bags far exceeds the cost retailers are currently paying to provide them. There is no need for this. Simple alternatives such as reusable bags and biodegradable single-use bags are available and already used in many stores throughout Greater Philadelphia. Single-use plastic bags should be limited because:

- **Plastic bags are a major litter problem.** They are so aerodynamic that, even when properly disposed of, they often blow away. Wind-blown plastic bags become a unique form of litter when tangled in trees or barbed wire causing visual blight among other problems. The City of Los Angeles found that plastic bags account for 25% of litter in their storm drains.<sup>4</sup> Bags easily escape from the garbage truck, landfill, boat, and average consumer's hands – and are then carried into lakes and waterways, and eventually into the ocean. Plastic bags make up the third largest type of litter from land-based sources found on U.S. coasts.<sup>5</sup>
- **Plastic bags are made from non-renewable fossil fuels.** The over 100 billion plastic shopping bags used each year in the United States<sup>10</sup> are made from the estimated equivalent of 439 million gallons of oil. Produce bags are used in comparable quantities. Most bags in the U.S. are made from natural gas, which has a relatively lower cost because of hydro-fracking.
- **Plastic bags harm wildlife.** The bags are often mistaken as food by both domesticated and wild animals. Birds may also use them for nesting material with dangerous results. Untold numbers of animals die per year by ingesting plastic bags.<sup>1</sup> These animals suffer a painful death, the plastic wraps around their intestines or they choke to death. Plastic bags choke, strangle, and entangle turtles, whales, sea lions, seals, birds, and fish among other species.<sup>2 3</sup> Many of these animals are already threatened due to issues such as over fishing or habitat loss. Single-use plastic is estimated to [outnumber fish](#) in the ocean by 2050.
- **Plastic bags cause the suffocation of human infants.**<sup>6</sup> Plastic shopping bags carry a warning to this effect.
- **Plastic bags do not biodegrade**<sup>7</sup> and although they do fragment through mechanical action<sup>8</sup> and photo-degradation in the presence of light, these processes are slow, taking an estimated 200+ years to complete. When an animal is killed by a plastic bag, the bag may go on to kill again. When plastic bags finally do break down, they do not dissolve into benign substances: they just fracture into smaller and smaller bits called “micro-plastics.” These small particles present the greatest long-term danger, as these particles displace food supplies in the world's oceans. As they have a nearly identical

density of seawater, their removal is not possible. Once micro-plastics enter our oceans, they will stay there virtually forever.

- **Plastic bags are rarely recycled** due to their low value – only 5.2% of our plastic bags are recycled.<sup>9</sup> But even if the recycling rate were significantly increased, the end result would still have an unacceptable negative impact.

## Bags are being Banned Worldwide

Bans on lightweight non-biodegradable check-out plastic bags have been put in place all over the world: in major cities such as Seattle, Austin, Mexico City, and Paris; California, Hawai'i, and 3 states in Australia; and countries such as Bangladesh, China, India, Italy, Macedonia, Rwanda, South Africa, and Taiwan. Some of these places have very extensive bans.<sup>14 15</sup>

This list is proof that plastic bags bans can be implemented successfully. The solution is to bring reusable plastic or cloth bags, or to use paper bags. Paper bags are easily reused and recycled, and biodegrade naturally. It is worth remembering that plastic bags did not even exist until the 1960s.

## Conclusion

Single-use plastic bags are contributing to serious issues facing Greater Philadelphia, the United States, and the world. Tackling these issues will require the culmination of many small actions to bring about large change. Banning single-use, non-biodegradable plastic bags is an important and easily implemented step towards meaningful change.

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