

## Testimony for the Environment and Transportation Committee In Support of Maryland House Bill 391

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The Animal Welfare Institute, a national nonprofit animal advocacy organization, strongly supports HB0391, sponsored by Delegates Hartman, Boyce, Arentz, Feldmark, Kerr, Lisanti, and Love, to prohibit the intentional release of balloons. This bill reflects growing concerns among the public and the balloon industry regarding the harmful effects of balloon releases on both the environment and human safety. To date, four states and numerous municipalities – including Baltimore, Ocean City, Montgomery County, and Queen Anne's County – have adopted similar laws.

## Threat to Wildlife and Other Animals:

The negative effects that balloons have on ecosystems and wildlife are well documented. Most commercial balloons are made of either mylar or latex, which is often touted as the "greener" option. Unfortunately, the latex used in most mass-produced balloons is treated with ammonia, tetramethyl thiuram disulfide, and zinc oxide in order to protect it from bacterial decomposition and extend the life of the balloon. Because of this treatment, it can take between 6 months and 4 years for latex balloons to decompose on land, while balloons that land in seawater can last up to 12 months.

For this reason, balloons are highly dangerous to marine animals. In fact, balloons are considered one of the top five most dangerous forms of pollutants in the ocean. After landing on water, balloons become subject to the same forces as seaweed and other ocean debris, often congregating into huge "garbage patches." A number of marine species, particularly turtles and birds, can consume balloons by accident, mistaking them for jellyfish. Large, tough, pieces of latex and ribbon can choke these animals, many of whom are accustomed to softer targets. Once consumed, balloon fragments can have an even more insidious effect. The very treatment designed to preserve balloons from decomposition makes it extremely difficult for animals to digest fragments. This can result in a blockage in the digestive tract, leading to death by starvation.

Balloons pose a similar threat to land animals. Grazing animals are particularly vulnerable and there have been documented incidents in recent years involving farm animals. For instance, in 2015 a show horse died after choking on a balloon ribbon that had fallen into his enclosure. The animal panicked and crashed through two fences, breaking two legs and his neck. In 2011, a farmer won a court case in the UK after his cow choked to death on one of the hundreds of balloons released by a neighboring school.

## Public Safety and Infrastructure:

In addition to their damaging environmental effects, balloons can also threaten public safety and infrastructure. These risks can once again be linked to their composition. In order to improve appearance, longevity, and durability, mylar balloons are coated in a thin metal film. This film is highly conductive, which can cause surges, shorts, and showers of sparks when mylar balloons become entangled in electrical wires.

Clean Virginia Waterways found that 20 percent of power outages that occurred in the state during 2015 were the result of mylar balloons getting caught in overhead power lines. The most significant of these outages left 14,600 customers without power. Similarly, Dominion Power reported that between 2011 and 2015, they encountered at least 40 balloon-related incidents each year in Virginia. The Los Angeles police department reported even more dramatic numbers. Out of the 912 power outages caused by external factors that occurred in 2015, 519 were the result of mylar balloons coming into contact with power lines. The majority of these outages occurred around special events when balloon releases commonly occur, such as Valentine's Day, Mother's Day, Easter, and graduations.

Beyond simple inconvenience, these kinds of balloon-related incidents can pose a greater threat to human safety due to electrical fires. For example, a transformer in San Diego overloaded and exploded after its neighboring power lines became entangled with a cluster of mylar balloons. This resulted in downed power lines and the outbreak of at least one vehicle fire. A similar incident occurred in 2019, when a mylar balloon became entwined with a power line in Montana. The electrical arcs and sparks produced by this contact set off the Saddle Butte fire, which destroyed 255 acres.

## Spread of Balloons:

Finally, it is important to remember that balloons are not simply a local problem. After being released, balloons can rise as high as 28,000 ft (5 miles) into the atmosphere. At this altitude, the temperature falls to roughly 40 degrees Fahrenheit, which causes balloons to elongate and shatter in a process called "brittle fracture." The resulting cloud of fragments then falls to earth, blanketing the area below with dangerous pollutants. Depending on the composition of the balloon, this process can take weeks to occur. Helium-filled mylar balloons can float for up to two weeks if properly sealed, while latex balloons tend to float for 1-2 days and generally remain at lower altitudes.

Throughout this process, air currents move the balloons away from the location of release. A balloon released as part of a 2002 study focusing on wind direction was found 1,300 miles away from where it started. Another study documented the discovery of an almost-intact balloon from the 1998 Olympic Games in Nagono, Japan, on a beach in Los Angeles, almost 5,300 miles away. This discovery was made just 49 hours after the celebration began. The same study found that many of the balloons discovered floating in the ocean and washed up on beaches in Japan were released as part of celebrations conducted much further inland and had managed to travel hundreds if not thousands of miles away. Because of these factors, it is incumbent upon every locality – whether adjacent to water or not – to prevent this widespread pollution. Only through collaboration among municipalities all across the nation can this danger be averted.

The Animal Welfare Institute respectfully urges the Environment and Transportation Committee to pass HB0391 and bring Maryland one step closer to joining the growing number of states, counties, and cities

that have already banned intentional balloon releases. We welcome any questions on the information presented in this testimony.

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