

## **ENVIRONMENTALLY ACCEPTABLE FOOD PACKAGING - BACKGROUND STATEMENT**

### **The Proliferation of Plastic**

According to the California Integrated Waste Management Board (CIWMB), plastics are the fastest-growing segment of the waste stream. While the use of plastic for packaging and consumer products continues to increase, plastic recycling is stalled at approximately 5 percent, much lower than the recycling rate for materials such as paper, glass and metal. Most of the current plastic recycling in California is attributable to beverage containers.

When it comes to “producer responsibility”, or the plastics industry taking a leadership role in developing a plastics recycling infrastructure, the CIWMB has stated that the industry “is not adequately addressing plastics shortcomings on its own. Currently, there is no comprehensive policy to effectively manage plastics and plastics waste in California.”

Of the six plastic resin types commonly used for packaging, polystyrene “Styrofoam” (coded #6) has been singled out for fast food packaging bans in 22 California cities and counties, and more than 100 US cities nationwide. Polystyrene foam is also known as “expanded” or “foamed” polystyrene.

### **Environmental Impacts of Polystyrene**

A widely reported environmental impact from foamed polystyrene (PS) containers results from improper disposal and litter. Unlike a paper cup or plate, a single PS plate or cup can break into hundreds of inert bits. The California Department of Transportation conducted a litter management pilot study during 1998–2000. That study found that PS foam represented 15 percent of the total volume of litter recovered from storm drains. Locally, data compiled by volunteers from the Surfrider Foundation shows that bits of PS foam comprise the largest number of items they collect during periodic beach cleanups.

PS is a significant component in coastal litter collection programs, and beach and ocean debris monitoring studies. A study conducted from August to September 1998 quantified Orange County, California, beach debris from 43 random sites from Seal Beach to San Clemente. The most abundant item was pre-production plastic pellets, followed by foamed plastic. Studies quantifying plastic debris found up to 5 kilometers off the Southern California coast indicate high levels of small plastic pieces originate from land-based sources, especially after storm events. These small plastic pieces, similar in size to plankton and more abundant than plankton, represent a particular risk to filter feeders.

The most troublesome of plastic marine debris is polystyrene because a single item can become hundreds of bits, it does not decompose, it floats and looks appetizing to wildlife, and can easily become airborne. It is ironic that a Styrofoam take-out container designed to transport food for short period of time will last forever whether in a landfill or in the environment as litter. According to the California Coastal Commission, 60 to 80 percent of all marine debris and 90 percent of floating debris is plastic. PS in the marine environment results in significant problems for wildlife. At least 162 marine species, including most sea birds, have been reported to have eaten plastics.

### **Environmental Stewardship**

The Monterey Bay National Marine Sanctuary is a federally protected marine area encompassing one of the globe’s most diverse marine ecosystems. The Sanctuary was established for the purpose of resource protection, research, education, and public use of this national treasure. Protecting this 5,322 square-mile area is the responsibility of everyone, particularly those of us who live and work in the Central Coast region.

Polystyrene is not collected for recycling in the Central Coast region because the material is light, bulky and inefficient to transport, and because there are no regional manufacturers using this material as a feedstock. When polystyrene can be recycled, such as into molded packaging blocks, recycled content can be as high as 25%, but is typically much lower. By comparison, paper, glass and aluminum can all be used to create 100% recycled content products.

We have seen first-hand the impact of polystyrene plastic litter in our fields, on our roadways and highways, in storm drains, the ocean and on our beaches. Banning polystyrene take-out packaging locally will help to address marine pollution by requiring the use of environmentally preferable alternatives while helping to educate business owners and citizens on the positive impact their packaging choices can make.

While packaging bans are narrowly focused and local in scope, according to the CIWMB they have limited ability to address the “global applications and ramifications of plastics.” The Environmentally Acceptable Food Packaging Ordinance is a policy intended to help create a local solution to polystyrene plastic pollution while taking a leadership role in the stewardship of the Monterey Bay region.