

# MIAMI BEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

## COMMISSION MEMORANDUM

TO: Mayor Philip Levine and Members of the City Commission

FROM: Jimmy L. Morales

DATE: January 11, 2017

SUBJECT: **AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 46 OF THE CODE OF THE CITY OF MIAMI BEACH, ENTITLED "ENVIRONMENT," BY AMENDING THE TITLE OF ARTICLE VI ENTITLED "EXPANDED POLYSTYRENE SALE AND USE RESTRICTIONS," TO ADD THE WORDS "FOR FOOD SERVICE ARTICLES," AND CREATING ARTICLE VII, TO BE ENTITLED "EXPANDED POLYSTYRENE RESTRICTIONS FOR FLOATING DOCKS, FLOATING PLATFORMS, AND BUOYS," TO PROVIDE REGULATIONS THEREFOR, AND TO PROVIDE FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR REPEALER, SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE.**

### **BACKGROUND**

On March 26, 2016, the Sustainability Committee made a motion recommending the Sustainability and Resiliency Committee consider prohibiting the use of uncovered/ un-encapsulated polystyrene docks on private property. This item was then sponsored by Commissioner John Elizabeth Aleman for further discussion during the Sustainability and Resiliency Committee (SRC).

During the October 26, 2016 SRC, a motion was passed by acclamation directing Environment and Sustainability staff to work with the City Attorney's Office on drafting an ordinance/resolution (Attachment B) that would prohibit the use of bare/unencapsulated polystyrene docks.

On November 16, 2016, the SRC referred the draft ordinance to City Commission, with a favorable recommendation to address both existing and new docks and to include other types of encapsulation options.

At the City Commission on December 7, 2016, the draft ordinance was passed for second reading with the recommendation of increasing the fines.

### **ANALYSIS**

Floating docks that used exposed, open cell, expanded polystyrene foam (EPS) present a continuous impact to our waterways. Environmental impacts associated with EPS and other plastics used for flotation include: the rate of degradation (water and sunlight), ingestion of particles by fish and wildlife, exposure to chemical elements such as benzene, styrene and

ethylene, and aesthetics/littering associated with particles of flotation. In addition to floating docks, buoys and as temporary floating structures are other sources of expanded polystyrene that can degrade into the environment (Attachment A).

Encapsulating the flotation eliminates the breaking down of the foam and enables the flotation to last longer. The hard plastic exterior does not allow marine borers (mussels, barnacles, pile worms, etc.) to dig into and breakup the foam resulting in the loss of buoyancy. In addition, exposed foam has a tendency to absorb gas, oil and other contaminants in the water. This will result in further breakdown of the foam and the retention of unwanted odors.

In 2007, the U.S. Bureau of Reclamation, which manage, develop, and protect water and related resources in 17 western states, required all new construction (or upgrades of existing facilities) should not use unenclosed foam dock flotation or other installation that results in break up and trashing the lake. The U.S. Army Corps of Engineers (USACE) issued a national policy in 2008 that precludes the use of expanded polystyrene unless it is encased in an approved protective coating. In the same year, the U.S. Department of Agriculture Forest Service requested Forest Service floating structures to only use extruded closed-cell EPS and the foam to be encased in a protective covering.

Eliminating the use of exposed polystyrene in the City's waterways, will reduce the breakdown of polystyrene in our environment. Over time this will improve the cleanliness of our waterways and ensure that we are protecting our sensitive marine habitats.

## **CONCLUSION**

The following is presented to the members of the Mayor and City Commission for discussion and further direction. The Administration recommends that the Mayor and City Commission approve the Ordinance on first reading.

Attachments:

- A- Pictures of fragmented polystyrene floating devices.
- B- Draft Ordinance.

SMT/ESW/FCT

Attachment A- Pictures of fragmented polystyrene floating devices (*Photographer: David Doebl**er*)



