

# *Historic Use Of Flame Retardants In U.S. Flexible Polyurethane Foam*

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# *About the Polyurethane Foam Association*

*North American Trade Association*

*Founded in 1980*

*Representing Flexible Polyurethane Foam*

*Manufacturers in U.S. and Canada*

*Suppliers of Chemical Raw Materials & Equipment*

# *FR Additives in Flexible Foam Production*

*Added to comply with various end-use requirements*

*Federal Motor Vehicle Safety Standard MVSS 302*

*Military Specifications*

*FAA Specifications*

*Customer Specifications*

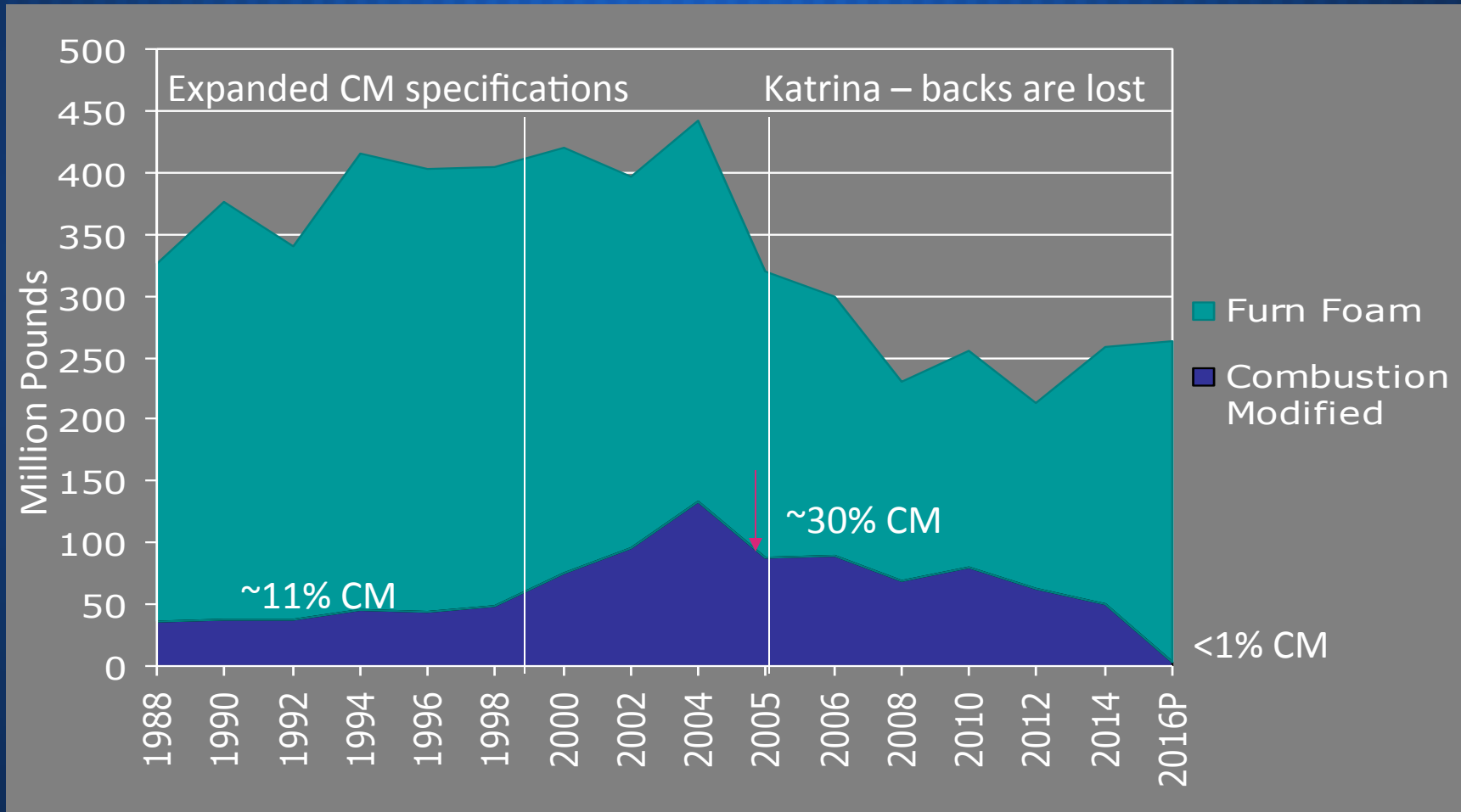
*(e.g. TB 133, British Standard, Boston/NJ Port Authority)*

***Notably: 1975 California TB 117***

## *Our Position on 1975 CA TB 117*

*TB 117 provided minimal safety improvement  
Emphasis on interior component testing  
Ignition / combustion performance affected by:  
Composite construction materials,  
Conditions in-use (soil, dust, pet urine)  
Test results were not reproducible  
FR additives did not contribute  
to comfort or durability*

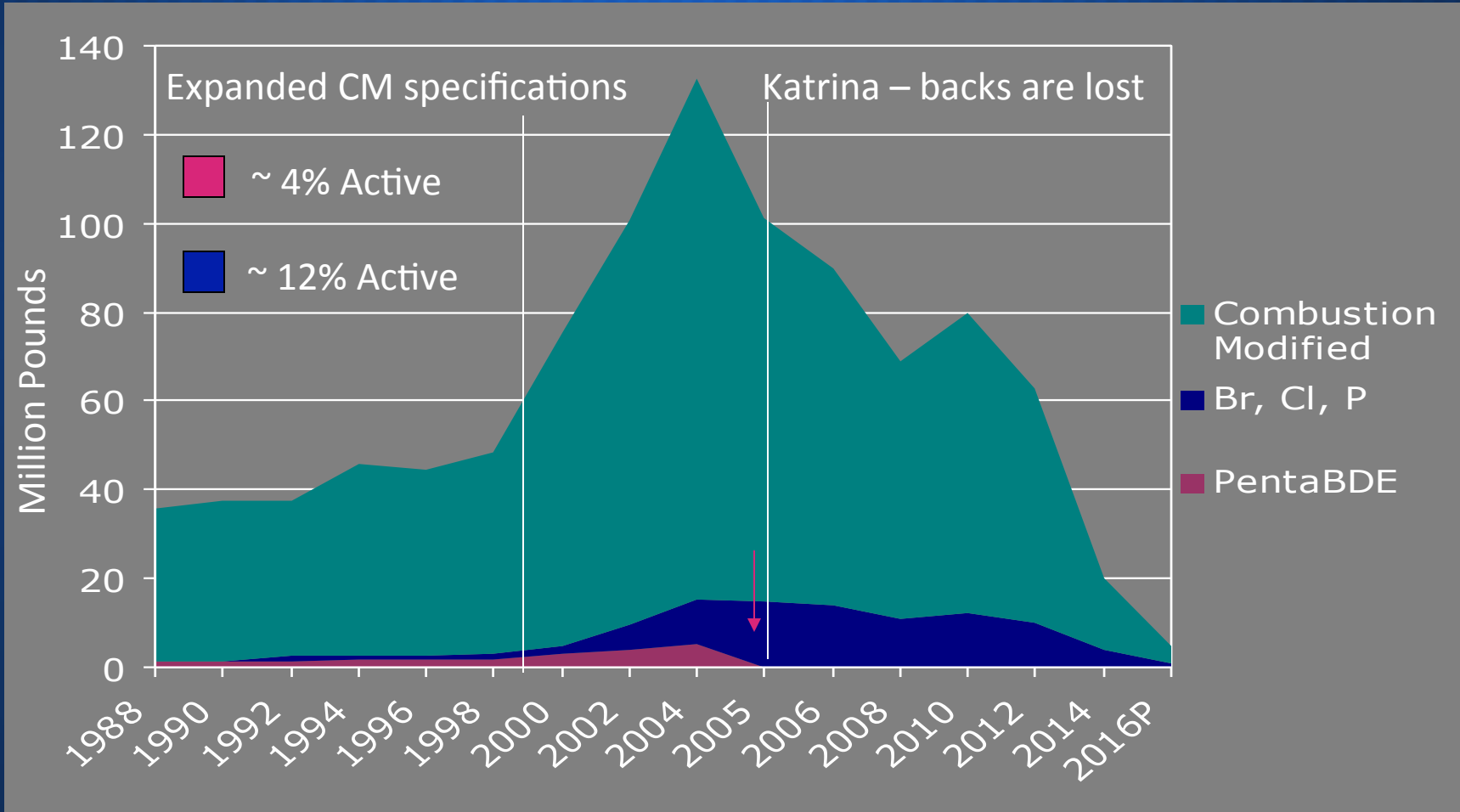
# U.S. Flex Slabstock Foam for Furniture vs Combustion Modified Foam



Source: SPI / API / CPI and PFA Estimates

PentaBDE discontinued

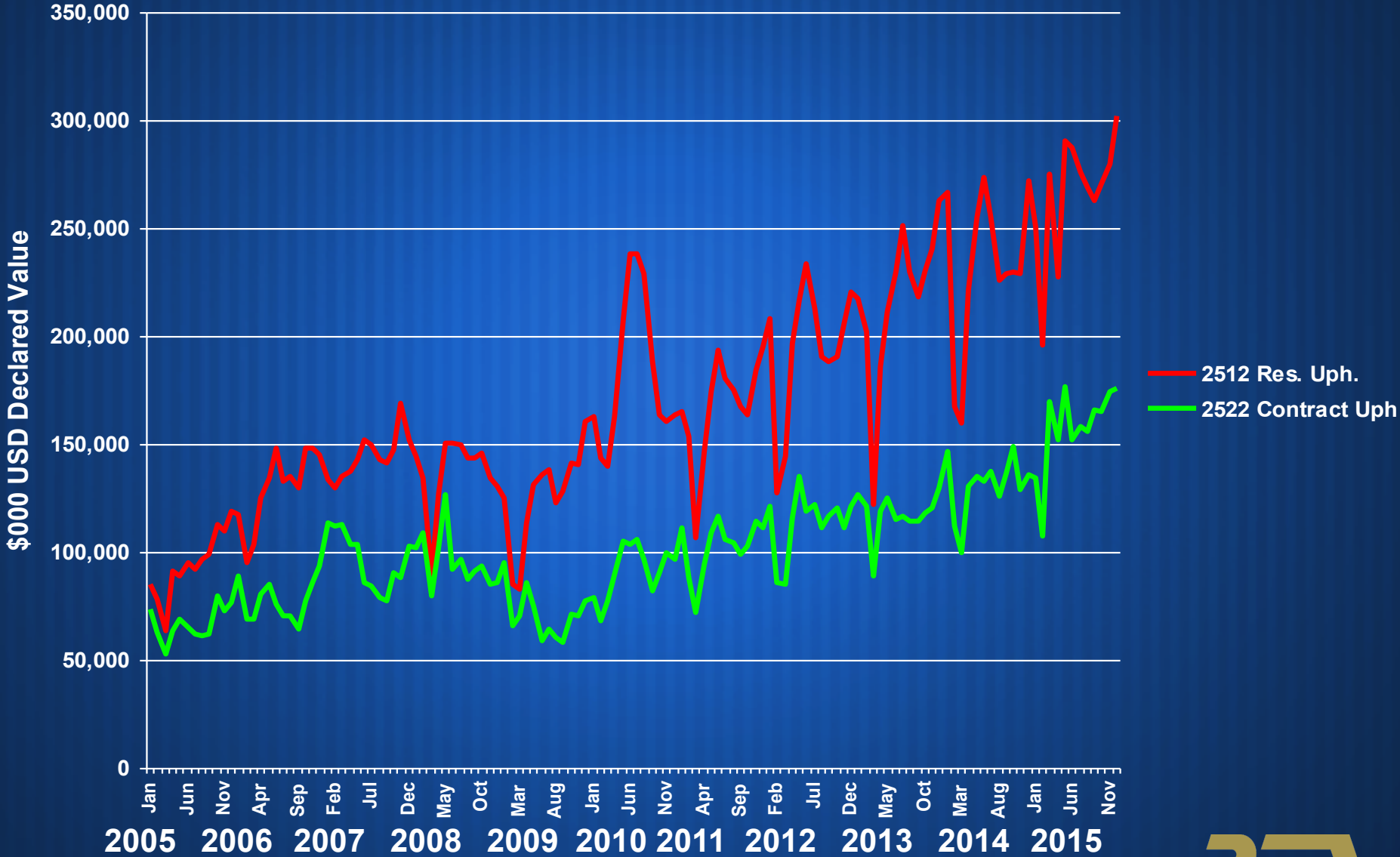
# U.S. Combustion Modified Slabstock vs FR Content



Source: PFA Estimates

PentaBDE discontinued

# U.S. Imports From China 2005 - 2015



Source: US Dept. of Commerce and PFA Pounds Poured Trend Reports



## *PFA Product Stewardship*

*PFA Manufacturing members worked to understand the issues related to FR additives, and helped to educate stakeholders, contributing to legislative changes that resulted in reduced demand for combustion modified foam products. PFA supports continued mechanical waste management that has been effective in reducing PentaBDE concentrations in recycled products to minimal background levels.*