

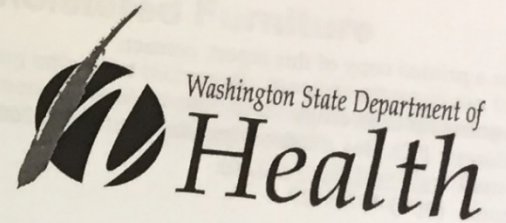
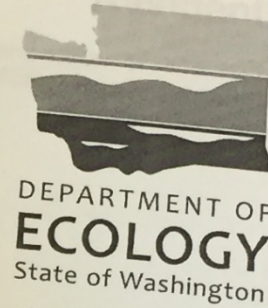
**Washington State  
Polybrominated Diphenyl Ether (PBDE)  
Chemical Action Plan:  
*Final Plan***

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January 19, 2006

Department of Ecology Publication No. 05-07-048

Department of Health Publication No. 334-079



**Alternatives to Deca-BDE in  
Televisions and Computers and  
Residential Upholstered Furniture**

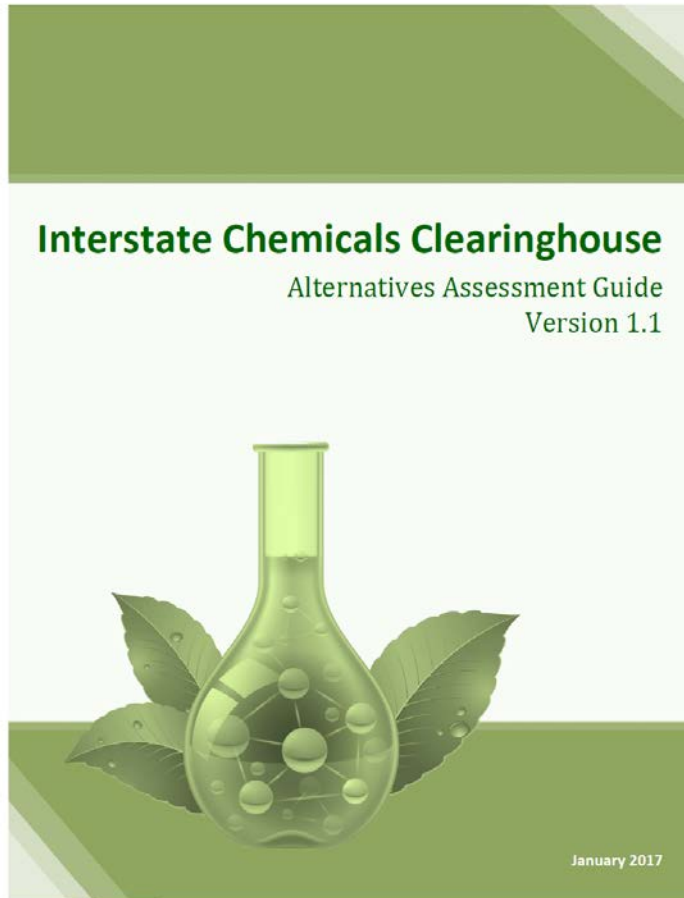
Implementation of RCW 70.76: Identifying safer and technically feasible alternatives to the flame retardant called Deca-BDE used in the electronic enclosures of televisions and computers and in residential upholstered furniture

**Final Report**

December 29, 2008

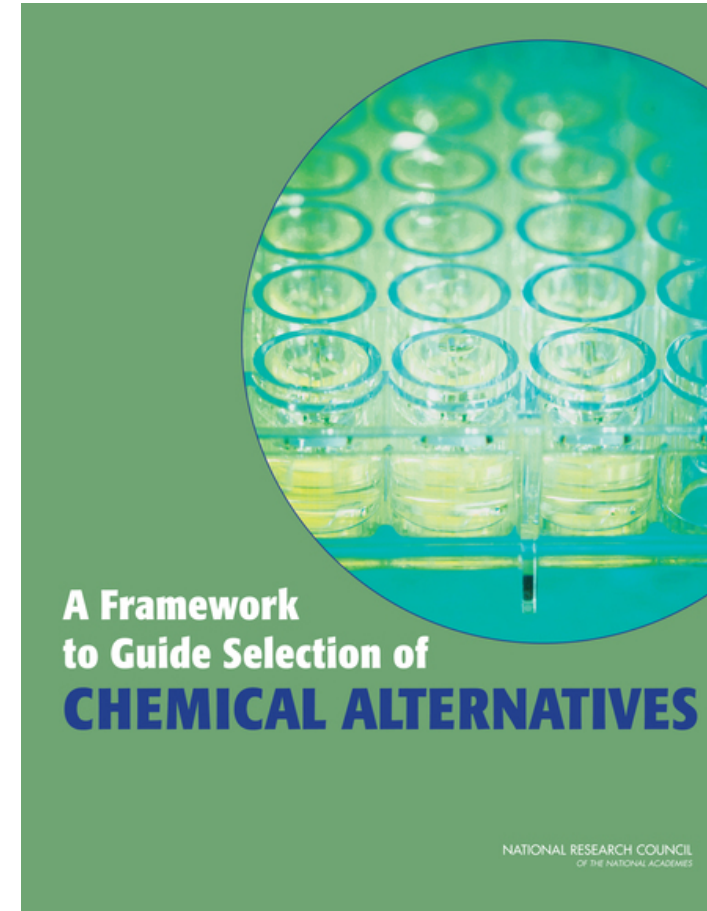
Department of Ecology Publication No. 09-07-041  
Department of Health Publication No. 334-181

# Safer Alternative Assessment Guides



**IC2  
Guide  
2017**

[http://theic2.org/alternatives assessment guide](http://theic2.org/alternatives_assessment_guide)

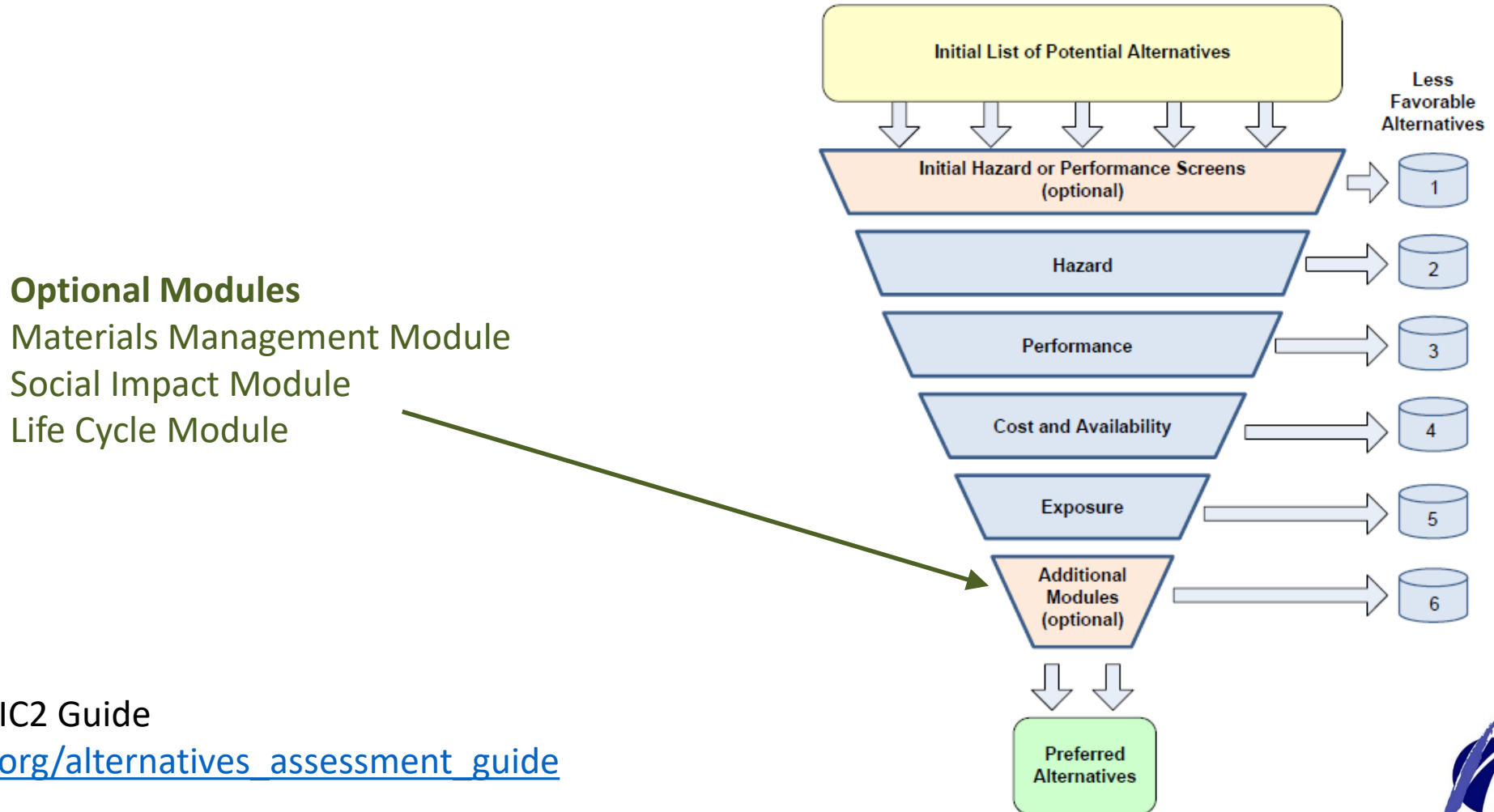


**National  
Academies  
of Sciences  
Engineering  
Medicine  
2014**

<https://www.nap.edu/catalog/18872/a-framework-to-guide-selection-of-chemical-alternatives>

# What's included in Alternative Assessments?

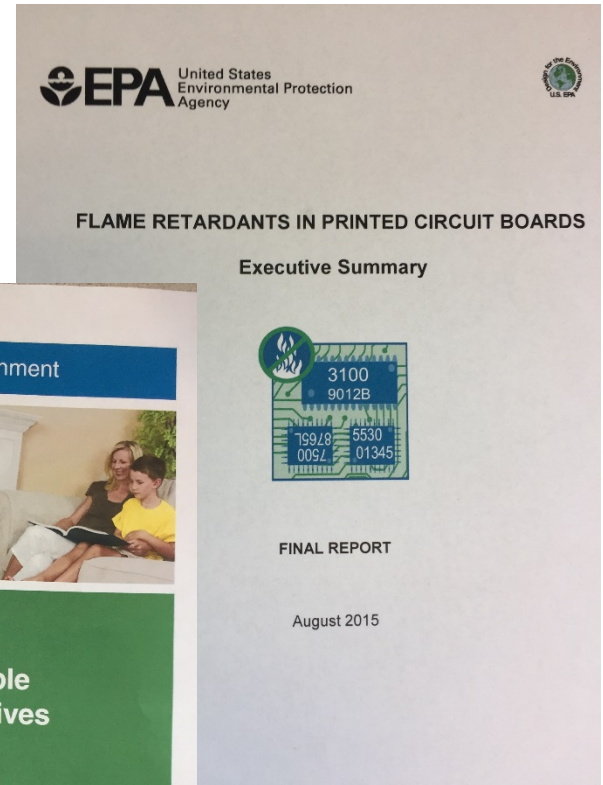
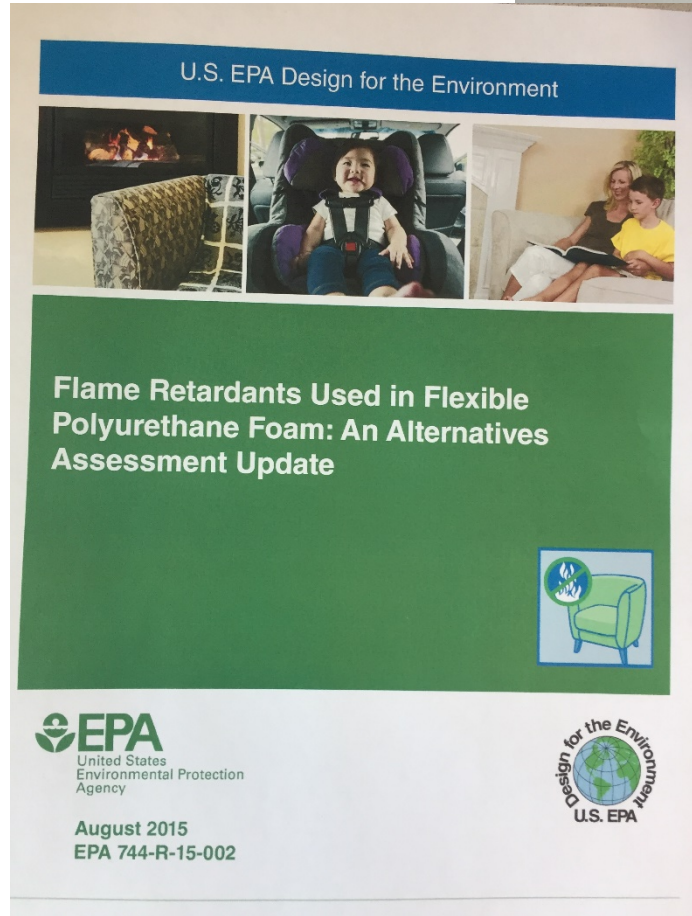
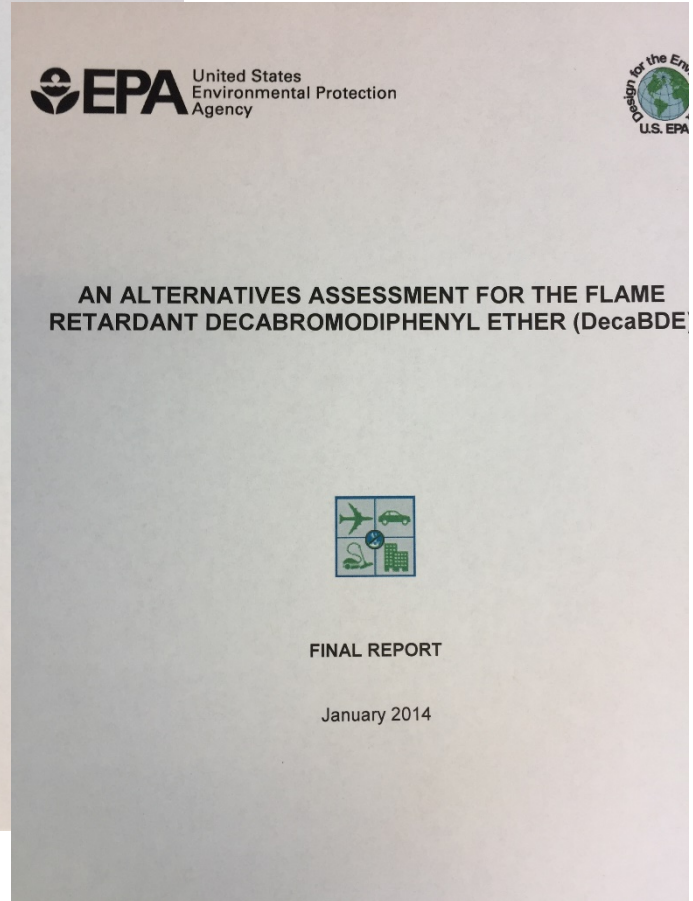
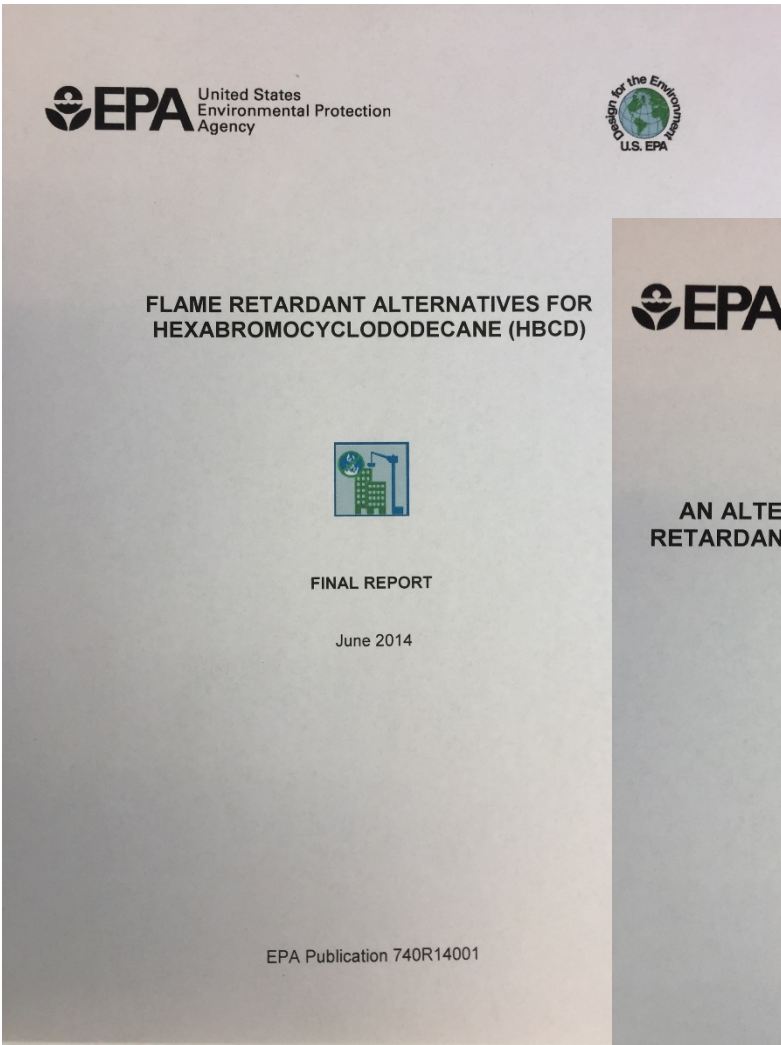
Figure 2: Sequential Framework



Source: 2017 IC2 Guide

[http://theic2.org/alternatives\\_assessment\\_guide](http://theic2.org/alternatives_assessment_guide)

# EPA Alternative Assessments Flame Retardants



# Alternatives to consider

1. First, is it necessary? (Can flammability codes can be met without it?)
2. Can a safer chemical be substituted?
3. Can you use an alternative material or process to eliminate need for using a hazardous chemical?
4. Can you re-design or reformulate a product to eliminate need for a process or material requiring a hazardous chemical.