2016-017

Response ID ANON-F7WP-29K2-C

Redacted

Submitted to **Furniture and furnishings fire safety regulations: proposed changes (2016)**
Submitted on **2016-11-11 12:47:51**

Introduction

1 What is your name?

Name:

2 What is your email address?

Email:

Yes

3 What is your organisation?

Organisation:
Bromine Science Environmental Forum – BSEF, aisbl

4 How would you classify your organisation?

Organisation type:
Business representative organisation/trade body

Other - please describe here:

Scope

5 The proposed regulations cover any item of domestic furniture which is ordinarily intended for private use in a dwelling and comprises a cover fabric and a filling.Do you agree with the revised definition of the Regulation's scope?

Yes

Comment box:

6 Do you agree with the proposals relating to sleeping bags and mattress protectors (i.e. those which can be put in a washing machine are explicitly removed from scope and do not have to meet the requirements of the regulations)?

Not sure

Comment box:

7 Do you agree with the proposals relating to cushions and seat pads (i.e. that they remain excluded from cover tests but the definition of these products to be specified more clearly)?

Not sure

Comment box:

8 Do you agree with the proposals relating to outdoor furniture (i.e. that outdoor furniture unsuitable for use inside the home, and clearly labelled as not complying with the Regulations) should be out of scope?

Not sure

Comment box:

9 Do you agree with the proposals relating to baby products (i.e. that items covered by covered by BS EN1888 (wheeled child conveyances) and BS EN1466 (carry cots and stands) are removed from scope, with padded playpens treated in the same way as mattresses)?

Not sure

Comment box:

10 Do you agree with the proposed treatment of second-hand products (i.e. that they would be required to bear the relevant permanent label)?

Not sure

Comment box:

Testing

11 Do you agree to removing the Filling 1 option? (i.e. to remove the option to test where covers are placed directly over the foam filling in the final product)

Not sure

Comment box:

12 Do you agree that the specifications set out in the draft Regulations for the test foam and fibre wrap are sufficient to achieve the objectives of the Regulations?

Not sure

Comment box:

13 Do you agree that the regulations should provide a protective cover option?

Not sure

Comment box:

14 If yes, do you agree with our proposed definition of protectiveness?

Not sure

Comment box:

15 Do you agree with the proposed requirements for components close to the cover?

Not sure

Comment box:

16 Do you agree that there is no need for the cigarette test for covers that pass the revised match test?

Not sure

Comment box:

17 For business respondents - Which of the routes to compliance do you expect to follow for most of your products?

Not sure

Comment box:

18 For business respondents - What do you expect the impact of the testing proposals to be on your use of flame retardants in covers?

Not sure

Comment box:

19 For business respondents - What do you expect the impact of the testing proposals to be on your overall use of flame retardants?

Not sure

Comment box:

Traceability and enforcement

20 Do you agree with the product record/technical file requirements for manufacturers and importers?

Not sure

Comment box:

21 Do you agree with the requirements for the single permanent label, and the proposal to remove the requirement for additional display labels?

No

Comment box:
Page 15, Point 53

Comment on second bullet: flame retardants are used by industry when warranted and supported by the available published human health data. Only products that have demonstrated safe use are allowed to be used under the Reach legislation.

Page 23, Point 85

Comment on the last bullet: in our view it is not necessary to indicate whether or not a flame retardant has been used to achieve the requirements of the Regulation. As mentioned above, the flame retardants used have to demonstrate safe use, so no concern to consumers is expected.

Page 24, Point 86

Comment: we think it is discriminatory to provide a label identifying furniture that contains flame retardants. Flame retardants comprise a large group of substances that belong to many different chemical families. So the phrase "flame retardants " in a label means that chemicals whose function is to reduce flammability have been used – nothing less and nothing more. No indication is available to the consumer from such a description of the properties of the substances. If the label is meant to alert consumers to the presence of something potentially dangerous, stating simply " flame retardants " misses the mark entirely. For one thing, the average buyer is unlikely to have heard of flame retardants, let alone appreciate the finer points of their diverse toxicology or environmental profiles. Furthermore, even if the consumer had read that some flame retardants were harmful and had been banned, surely his first thought would be that these would not be permitted to be used in commerce, so what was the purpose of the label ?
As such, we believe this proposal to be ill founded and biased and adopted casually from the California regulations, without due care and consideration. . Please see also our responses to the previous two points.

22 What do you think is the most effective means of conveying the use of flame retardants in the cover of this product eg by text, symbol?

Comment box:
Please see previous comment

Other questions

23 Do you agree that a 24 month transition period is sufficient, and that the changes should be reviewed in five years?

Not sure

Comment box:

24 Do you have any other comments on the proposals or draft regulations?

Comment box:
We would like to comment on some general statements used to contextualize the exercise. These concern statements made in the executive summary, the explanatory section to the proposal, and the Impact Assessment:

The following assertion:

"evidence suggests that flame retardant chemicals, particularly brominated flame retardants, when broken down into individual constituents, can be harmful to human and animal health, and the environment. Regulatory change therefore has the potential to reduce the use of flame retardants in the production of furniture and bring associated benefits to industry and to consumers"

Comment: The regulation should reflect standards to ensure adequate and consistent fire safety measures for furniture in order to protect human life and property. It should not be focused on a reduction in flame retardants use.
The underlying general assumption in this paragraph is that all flame retardants (FRs) are harmful and their use needs to be reduced. This is not the case. FRs have saved countless lives while at the same time their safe use has been demonstrated. Concerning the impact of flame retardant substances on health and the environment, in the EU, each substance needs to be registered under REACH whilst demonstrating its safe use. Substances which have been deemed to have risks for the environment or human health have been/ will be restricted in the EU, e.g., decabromodiphenyl ether (DecaBDE) and hexabromocyclododecane (HBCD).
Moreover, the statement is generalising and discriminatory. If used it should specify which brominated flame retardants (BFRs) are at issue (DecaBDE, HBCD?). The statement is misleading because evidence does not suggest that all flame retardant chemicals, particularly all brominated flame retardants, when broken down into individual constituents, can be harmful to human and animal health, and the environment.

Introduction
Page 8, point 22:

The following generalizations:

"Evidence suggests that flame retardant chemicals, particularly brominated flame retardants, when broken down into individual constituents, can be harmful to human and animal health, and the environment. (Research references at Annex 5). For this reason, REACH2 the EU's chemical legislation, is proposing to restrict the use of decaBDE, a Brominated Flame Retardant (BFR) widely used in furniture production. If adopted the restriction would come into force in 2018. A substitute has been found for decaBDE but the possibility of it also being restricted at some point in the future cannot be ruled out. The necessity of changing chemicals to comply with REACH puts a financial burden on the furniture industry which could be avoided if chemical use were reduced."

Comment: the same comments as to point 3 above apply. This paragraph is generalizing and speculative. Please mention which BFRs are meant, to which constituents they allegedly break down, and which specific affects you describe.

The paragraph is also contradictory. It demonstrates the effectiveness of REACH in ensuring safe use of chemicals (e.g., the use of DecaBDE will be restricted because it had been found unsafe for use). You note that a substitute has been found for decaBDE but then offer a prejudicial comment saying it could also be banned or restricted.

Whether or not the furniture industry will face additional costs associated with substituting FR chemicals needs to be seen in the broader context of the fire risk posed in putting on the market products which could contribute to fire incidents, material damage, injuries and fatalities as a result of a fire.

Page 9, point 24:
"Some European Member States object strongly to the use of flame retardant chemicals in furniture because of the growing evidence of their deleterious effect on health and the environment, and EU consumers are deterred from purchasing UK products."

Comment: again, we disagree with the use of blanket statements on whole substance groups and unspecified effects. Please avoid generalisations.

The objective of the FFRs is to primarily ensure that upholstered furniture meets high fire safety levels to protect the consumer against deadly fires and property losses. REACH compliant flame retardants help to achieve this goal at reasonable cost. In our view, this should be the FFRs message delivered to the public.

Point 25

"Concerns about the safety of flame retardant chemicals are not confined to Europe. Lobbying by environmental bodies, combined with consumer concern, has resulted in a change in the furniture flammability standard in California to exclude the use of flame retardants3, and Washington banning five flame retardants used in furniture and children's products. Reducing UK manufacturers' use of flame retardants should therefore also make it easier for them to export to Europe and beyond."

Comment: It is important to note that maintaining adequate and consistent fire safety standards should be the main focus and not the reduction of flame retardants. Recently, in September 2016 the U.S. Consumer Product Safety Commission evaluated whether to nationalize the California furniture flammability standard and the CPSC recommended not to nationalize.

(See also comment to point 24 and the role of REACH compliant FRs for meeting high fire safety levels)

Page 12, Point 46

"Moreover, this could help to address particular concerns raised about the use of flame retardants in children's products."

We don't see how this change in regulations would specifically address the concerns about flame retardants in children's products.

Page 14, Point 50

"... intended to make the tests better reflect how modern furniture is constructed, whilst incentivizing a reduction in the use of flame retardant chemicals."

As commented earlier, the regulation should be focused on a robust fire safety standard and not incentivize a reduction of flame retardant at the cost adequate fire safety.

Page 42, Annex 5: Research references

Comment: we question the relevance and significance of some of the papers cited in Annex 5. The references are quoted very selectively and are not exhaustive. Only a handful of publications are quoted while there is a plethora of information available. They do not allow conclusions without a proper assessment of their quality, reliability and repeatability and the context of other studies in a proper risk assessment. They are also not representative of the different flame retardants that can be applied and thus give a very biased and incomplete view of the hazard data.

Scientific Opinion on Brominated Flame Retardants (BFRs) in Food: Brominated Phenols and their Derivatives
• As implied by the title, the evaluation looked into brominated phenols. We are not sure why this substance group has been included, as it is not relevant to exposure from upholstered furniture
• The evaluation concluded that "it is unlikely that current dietary exposure to 2,4,6-TBP in the European Union would raise a health concern. Also exposure of infants to 2,4,6-TBP via breast feeding is unlikely to raise a health concern."

Scientific Opinion on Emerging and Novel Brominated Flame Retardants (BFRs) in Food
• No specific concern was identified by the study
• It concludes that "Due to the very limited information on occurrence, exposure and toxicity, the CONTAM Panel could not perform a risk characterisation for any of the BFRs considered."

In Utero and Childhood Polybrominated Diphenyl Ether (PBDE) Exposures and Neurodevelopment in the CHAMACOS Study
• The study only looks at PBDE congeners associated with c-PentaBDE and c-OctaBDE, which are banned. The concern would therefore seem to be addressed already

Prenatal Exposure to PBDEs and Neurodevelopment
• The study only looks at PBDE congeners associated with c-PentaBDE and c-OctaBDE, which are banned. The concern would therefore seem to be addressed already

Prenatal Exposure to Organohalogens, Including Brominated Flame Retardants, Influences Motor, Cognitive, and Behavioural Performance at School Age
• The only BFRs that the study looks at are PBDE congeners associated with c-PentaBDE, c-OctaBDE, and HBCD which are all banned. The concern would therefore seem to be addressed already

Law et al, Environment International 65, 2014, pp.147-158
• No title has been quoted. The study is titled "Levels and trends of PBDEs and HBCDs in the global environment: Status at the end of 2012"
• The only BFRs that the study looks at are PBDE congeners associated with c-PentaBDE, c-OctaBDE, and c-DecaBDE and HBCD which are all banned. The concern would therefore seem to be addressed already

Kim et al, Chemosphere 106, 2014, pp.1-19 43, titled "Health consequences of exposure to brominated flame retardants: A systematic review"
• The study found no robust evidence that exposure to BFRs is harmful
• It speculates that exposure to BFRs may be harmful to health, but states that "In conclusion, limited epidemiological data, weak and inconsistent associations across studies, lack of comparative and large studies with appropriate exposure assessment in humans and incomplete understanding of biological mechanisms precludes the establishment of a causal relationship when assessing the evidence through conventional epidemiological approaches"

We have similar comments on the Impact Assessment:

The following generalizations:

"There is growing body of literature that has linked health and environmental harm with the flame retardant chemicals (brominated, chlorinated and phosphate) used in furniture. Furniture flame retardants can be associated with endocrine disruption, immunotoxicity, cancer, and/or reproductive and neurological impairments, lowered IQ, and hyperactivity. Flame retardants migrate out of furniture, settle in dust, and are ingested by humans and animals. Young children have the highest blood levels due to hand-to-mouth behaviour. In the USA, a majority of residential fire deaths result from inhalation of toxic gases, and soot and smoke can obscure escape. One study indicates that US fire fighters have high rates of types of cancers associated with dioxin exposure; the dioxins produced when flame retardants burn are believed to contribute. There are some signs in the UK (from press and consumers) that consumer concern over the chemical treatment of furniture is growing here."

Comment:
- The "evidence" presented here is a series of generalisations and speculation. We refer to our above comments on these points
- It is correct that there is growing body of literature that has found health and environmental effects of flame retardant chemicals. As more studies are conducted it is completely normal that more findings are reported. This is the case with any substance and is simply a question of the doses tested. It is therefore important, to assess whether or not there is a risk from the current or future use of these substances. Just mentioning that there are effects is scaremongering. Otherwise, everyday chemicals such as table salt and water would need to be banned as they are deadly toxic if ingested in high quantities.
- It is true that most fire deaths result from toxic fire gases, mainly through suffocation from carbon monoxide exposure resulting from all combustible products. This is why FRs are needed, to slow down the progression of fires and increase the time available to escape from fires
- It is correct that incomplete combustion of BFRs can produce dioxins. So does incomplete combustion of ambient chlorine levels, which is present in everyday products such as wood at levels 10 times higher than bromine.
- By reducing the overall number of fires, BFRs overall reduce the formation of dioxins/ furans. We suggest the following strikethrough "In the USA, a majority of residential fire deaths result from inhalation of toxic gases, and soot and smoke can obscure escape. One study indicates that US fire fighters have high rates of types of cancers associated with dioxin exposure; the dioxins produced when flame retardants burn are believed to contribute. There are some signs in the UK (from press and consumers) that consumer concern over the chemical treatment of furniture is growing here." This text is not really relevant to the discussion on health or environmental exposures.
- We suggest to add the following text "Available human health data in addition to exposure information must be taken into consideration collectively to determine if exposure to a specific flame retardant present a risk or if there is sufficient margin of safety to, indicate a low level of health concern"

Page 17
"Health benefits from reduced use of FRs
5.47 Various researchers have shown that brominated flame retardants are present in house dust, from various consumer products such as furniture (see Annex for sources). Traces of BFRs have been found in human blood, particularly children, and in pets, i.e. because these tend to be in closer proximity to house dust (see 5.3 and 5.4 above). Other research shows long-term effects in rats from inducing BFRs at the post-natal stage, e.g. loss of attention and mood swings (see Annex for sources). UK furniture retailers/manufacturers have reported that they are receiving increasing correspondence from the public concerned about the health effects of chemicals in furniture."

Comment

- we refer to our above comments. It needs to be discussed whether or not the mentioned trace levels present an actual risk, in other words, do they actually cause the long term effects described above in consumers?
- We suggest the following text be added. "In order sufficiently understand the potential risk associated with FR exposure, available human health data in addition to exposure information must be taken into consideration collectively."

"Environmental benefits
5.48 At present, old upholstered furniture ends up in land-fill. Some of the FR chemicals present therein leach out into the environment and, according to Food Standards Agency research, get into the food chain (see Annex for sources). REACH11 the EU's chemical legislation, is proposing to restrict the use of decaBDE, a Brominated Flame Retardant (BFR) widely used in furniture production. If adopted the restriction would come into force in 2018. Defra reports that there are significant problems with the destruction of FR-containing products at end-life, e.g. with building waste. BEIS, therefore, wishes to alleviate this problem by introducing an FR-reducing flammability test (as well as allowing for innovation in new 'barrier' technology that could eventually lead to a total absence of FRs in furniture)."

Page 20
ANNEX 1 - Brief list of reference material regarding the effects of FRs on health/environment

Reference 1 (EFSA opinion on PBBs in food)
• Historically used in electronic equipment, PBBs have not been produced since the late nineties and never been used in back coating. The paper cited is about PBBs in the food chain. We therefore question the relevance of this paper to the statements about breakdown products arising from BFRs used in upholstered furniture.

Reference 2 (EFSA opinion on PBDEs in food)
• Below is what the EFSA CONTAM Panel concluded (note that decaBDE is predominantly composed of the BDE 209 congener)
• "PBDEs in house dust and cars, particularly BDE-209, can be an important additional source of exposure for young children, and is estimated to be in the range of 0.5-80 ng/kg b.w. The CONTAM Panel noted that exposure from dust is far below the BMDL10 for BDE-209 of 1.7 mg/kg b.w. per day, and therefore of no health concern."
• The CONTAM Panel concluded that for BDE-47, -153 and -209 current dietary exposure in the EU does not raise a health concern.
• We would like to repeat our previous comment: c-PentaBDE, c-OctaBDE, c-DecaBDE and HBCD which are all banned. The concerns (if any) would therefore seem to be addressed already

Reference 3 (EFSA opinion on HBCDD in food)
• As with the previous reference on decaBDE, HBCD exposure from house dust and / or diet is not thought to be of concern:
• "The CONTAM Panel concluded that current dietary exposure to HBCDDs in the European Union does not raise a health concern. Also additional exposure, particularly of young children, to HBCDDs from house dust is unlikely to raise a health concern. "

Reference 4 (EFSA opinion on TBBPA and its derivatives in food)
• TBBPA is almost exclusively used in electronic circuitry and we therefore question its inclusion here. In any case, the following conclusions of EFSA may be worth noting, in terms of exposure, the report concludes:
• "In view of the large Margins of Exposures (MOEs), the Panel concluded that "current dietary exposure to TBBPA in the European Union does not raise a health concern. Also exposure of infants via human milk does not raise a health concern. Additional exposure, particularly of young children, to TBBPA from house dust is unlikely to raise a health concern". "

References 5 and 6 (Scientific Opinion on Brominated Flame Retardants (BFRs) in Food: Brominated Phenols and their Derivatives and Scientific Opinion on Emerging and Novel Brominated Flame Retardants (BFRs) in Food)
• These references were also quoted in Annex V of the main report. Please refer our comments there.

Reference 7: (Study on Toxic Exposure and Health Risks to US Firefighters)
• The link provided to the study does not work. The study is not accessible

Reference 8: (Indoor Contamination with Hexabromocyclododecanes, Polybrominated Diphenyl Ethers, and Perfluoroalkyl Compounds: An Important Exposure Pathway for People?)
• We would like to repeat our previous comment: c-PentaBDE, c-OctaBDE, c-DecaBDE and HBCD which are all banned. The concerns (if any) related to BFRs would therefore seem to be addressed already

Reference 8: In Utero and Childhood Polybrominated Diphenyl Ether (PBDE) Exposures and Neurodevelopment in the CHAMACOS Study
• This study is also quoted in Annex V of the main report. Please refer our comments there.

Prenatal Exposure to PBDEs and Neurodevelopment
• This study is also quoted in Annex V of the main report. Please refer our comments there.

Prenatal Exposure to Organohalogens, Including Brominated Flame Retardants, Influences Motor, Cognitive, and Behavioral Performance at School Age
• This study is also quoted in Annex V of the main report. Please refer our comments there.

Advisory Committee on Hazardous Substances: opinion on decabrominated diphenyl ether (decaBDE):
• We would like to repeat our previous comment: DecaBDE is banned in the EU. The concerns (if any) would therefore seem to be addressed already

Impact Assessment

25 Do you agree with our estimate of traceability time in the Impact Assessment – ie one-off input of 16 hours per firm and ongoing per year time of 48 hours per firm? If not can you provide additional evidence to support your answer?

Not sure

Comment box:

26 How much do you estimate you would save per year from the removal of the cigarette test?

Amount saved::

Not sure

Comment box:

27 How much do you estimate you would save per year from reduced use of flame retardants?

Amount saved::

Nothing

Comment box:
Please refer to our response to question 29

28 Are you aware of any further costs or benefits we have not identified in the impact assessment? Please support with any evidence you have.

Yes

Comment box:
Since cost, benefit and feasibility are noted in maintaining a high safety it should be noted that the 2016 review of the US Consumer Product Safety Commission that reviewed whether to nationalize California's standard or finalize a draft standard from 2008. CPSC found that neither standard would improve upholstered furniture fires safety and that the tests don't adequately predict real world fire scenarios.
https://www.cpsc.gov/s3fs-public/The%20Feasibility%20Benefits%20and%20Costs%20of%20Adopting%20-TB117-2013%20-%20September%208%202016.pdf

Please also refer to our response to question 29.

29 To what extent do you agree that, overall, these proposals represent a reasonable compromise – bearing in mind the information in this consultation document, feedback on the previous (2014) consultation, and other stakeholder input during the review?

Strongly disagree

Comment box:
We think these amendments will weaken fire safety levels thus creating an increased and serious risk to public safety. Flame retardants play a critical role in reducing the impact fires have on people, property and the environment, and have been a primary technology, enabling furniture manufacturers to meet the UK Furniture and Furnishings Regulations. Indeed, the Government's own 2009 Greenstreet Berman study showed that in the period between 2002 and 2007 the UK Regulations accounted for 54 fewer deaths per year, 780 fewer non-fatal casualties per year and 1065 fewer fires each year following their introduction in 1988. 32 of these deaths every year are directly attributable to the cigarette and match tests, which are now proposed to be amended.