PRODUCTS FIRST IGNITED IN U.S. HOME FIRES

Kimberly D. Rohr
Fire Analysis and Research Division
National Fire Protection Association

April 2005

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471, www.nfpa.org

Upholstered Furniture Fires in U.S. Homes*, by Year
Structure Fires Reported to U.S. Fire Departments, 1980-2002

Reporting Year	Fires	Civilian Deaths	Civilian Injuries	Direct Property Damage (in Millions)	Adjusted Loss in Millions of 2002 Dollars
1980	36,850	1,356	2,972	$219.5	$479.6
1981	33,830	1,360	2,626	$218.2	$430.8
1982	27,480	1,185	2,532	$271.9	$506.1
1983	24,560	1,099	2,698	$200.2	$361.1
1984	24,080	1,093	2,313	$217.1	$375.3
1985	23,110	931	2,331	$225.0	$375.6
1986	22,120	1,068	2,197	$234.1	$384.4
1987	20,760	1,030	2,145	$196.0	$310.3
1988	20,180	1,098	2,291	$223.2	$339.6
1989	18,050	883	2,116	$229.2	$332.7
1990	16,360	867	2,052	$256.7	$353.6
1991	16,160	676	2,053	$290.1	$383.0
1992	15,190	631	1,657	$188.4	$241.6
1993	14,330	653	1,955	$231.1	$287.6
1994	13,970	669	1,708	$233.8	$283.8
1995	13,300	659	1,676	$239.3	$282.3
1996	12,790	652	1,608	$249.2	$285.9
1997	11,800	655	1,444	$212.7	$238.3
1998	11,580	543	1,425	$224.5	$247.9
1999	11,000	472	1,225	$275.6	$297.4
2000	10,320	632	1,189	$293.2	$306.4
2001	9,490	639	1,098	$276.3	$280.7
2002	8,840	502	984	$281.5	$281.5
Annual Average					
1980-2002	18,090	841	1,926	$238.6	$333.3
1999-2002	9,910	561	1,124	$281.7	$291.5

* "Homes" include one- & two-family dwellings, duplexes, manufactured homes, apartments, tenements, flats, townhouses, and condominiums. The home category does not include rooming, boarding, or lodging houses; hotels or motels; dormitories or fraternity or sorority houses; barracks or bunk houses; or any institutional property providing lodging.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Fires are rounded to the nearest ten, civilian deaths and injuries are rounded to the nearest one, and direct property damage is rounded to the nearest hundred thousand dollars. Fires reflect a proportional share of fires where item was ignited was unknown or unreported.

Source: NFIRS and NFPA survey. Inflation adjustments were based on Table No. 697, "Purchasing Power of the Dollar: 1950 to 2003," U.S. Census Bureau's Statistical Abstract of the United States: 2004-2005, 124th Edition, 2004.

Upholstered Furniture Fires in U.S. Homes*, by Heat Source Involved
1999-2002 Structure Fires Reported to U.S. Fire Departments

Heat Source	Fires		Civilian Deaths		Civilian Injuries		Direct Property Damage (in Millions)	
Cigarette	3,400	(34%)	277	(49%)	465	(41%)	$84.5	(30%)
Radiated or conducted heat from operating equipment	910	(9%)	34	(6%)	60	(5%)	$26.2	(9%)
Candle	870	(9%)	17	(3%)	149	(13%)	$30.5	(11%)
Arcing	820	(8%)	23	(4%)	67	(6%)	$25.7	(9%)
Cigarette lighter	660	(7%)	46	(8%)	126	(11%)	$19.3	(7%)
Match	640	(6%)	13	(2%)	54	(5%)	$21.5	(8%)
Unclassified hot or smoldering object	380	(4%)	14	(3%)	32	(3%)	$9.9	(4%)
Hot ember or ash	370	(4%)	16	(3%)	34	(3%)	$6.8	(2%)
Heat from other open flame or smoking materials	360	(4%)	27	(5%)	18	(2%)	$13.0	(5%)
Heat from undetermined smoking material	320	(3%)	39	(7%)	44	(4%)	$7.7	(3%)
Unclassified heat from powered equipment	270	(3%)	23	(4%)	12	(1%)	$11.9	(4%)
Unclassified heat source	230	(2%)	6	(1%)	6	(1%)	$8.7	(3%)
Spark, ember or flame from operating equipment	120	(1%)	0	(0%)	8	(1%)	$4.5	(2%)
Unclassified heat spread from another fire	110	(1%)	2	(0%)	9	(1%)	$1.9	(1%)
Incendiary device	70	(1%)	0	(0%)	4	(0%)	$0.8	(0%)
Pipe or cigar	70	(1%)	13	(2%)	18	(2%)	$1.6	(1%)
Other known heat source	310	(3%)	10	(2%)	19	(2%)	$7.1	(3%)
Total	9,910	(100%)	561	(100%)	1,124	(100%)	$281.7	(100%)

* "Homes" include one- & two-family dwellings, duplexes, manufactured homes, apartments, tenements, flats, townhouses, and condominiums. The home category does not include rooming, boarding, or lodging houses; hotels or motels; dormitories or fraternity or sorority houses; barracks or bunk houses; or any institutional property providing lodging.

Note: These are national estimates of fires reported to U.S. municipal fire departments and so exclude fires reported only to Federal or state agencies or industrial fire brigades. National estimates are projections. Casualty and loss projections can be heavily influenced by the inclusion or exclusion of one unusually serious fire. Fires are rounded to the nearest ten, civilian deaths and injuries are rounded to the nearest one, and direct property damage is rounded to the nearest hundred thousand dollars. This table includes a proportional share of fires in which the item first ignited was unknown or unreported. Upholstered furniture fires in which the heat source was undetermined or not reported were allocated proportionally among fires of known heat source. Sums may not equal due to rounding errors.

Source: NFIRS and NFPA survey.

EXHIBIT 5

THE
MONTEBELLO
CONSULTANCY

Mount Pleasant, Cwm Lane, Govilon, ABERGAVENNY, Gwent NP7 9RY Tel & Fax: +44 (0)1873 831 186

CompuServe e-mail 101514,3663 Internet asmith_montebello@compuserve.com

To Stephen Grayson, Intersciences Communications Ltd., London
My ref. MBLET574 Your ref.

28 January 1999

Dear Steve,

Further to our conversation I am putting a few notes on paper as you asked

During the period 1963 - 1988 I was employed as Divisional Chief Physicist for the Dunlopillo Division of Dunlop Ltd, at that time one of the U.K.'s largest manufacturers of flexible polyurethane foam. Much of my work had been on behalf of the whole foam industry so that from 1988 to 1990 I was retained as a special consultant by the British Rubber Manufacturer's Association which was and is the U.K. organization for the flexible polyurethane foam industry. My duties included special responsibility for furniture fire issues both for the company and the B.R.M.A. I represented the B.R.M.A. in national and the BSI in European and International Standardisation bodies dealing with flammability of furniture. I held chairman level appointments in all of these fora. My brief covered not only standards but testing techniques and foam development. This period included the time during which the U.K. government was preparing for and introduced its furniture flammability regulations.

The first Government regulations controlling the ignitability of domestic furniture came into force at the end of 1982. In the late 1980's when the U.K. government were pursuing a policy of improving the post ignition behaviour of furniture in the U.K. consumer market the technology was therefore well developed for producing match and higher ignition source resistant furniture grade polyurethane foams. Ignitability tests with sources such as the No 5 wooden Crib were passed routinely. All foams supplied for automotive use passed the FMVSS 302 ignitability test. When the Department of Trade and Industry introduced legislation to control post ignition behaviour of furniture in 1990 the industry was already prepared to introduce CMHR and other technologies and did this with minimum cost penalty. Existing slabstock machinery used for production of furniture grade flexible polyurethane foams

required little or no conversion to manufacture the new CMHR foams which captured the furniture market. Any equipment changes which were needed were low in cost. At that time upholstery fabrics and mattress covers posed a slightly greater problem but could be made sufficiently resistant using flame retardant or backcoating treatments. These fabric and fibre treatments were also available at that time as were inherently resistant fibres and textiles.

Though it had been stated before the event that the cost of production and the resultant foam prices would rise by at least thirty per cent if the 1990 legislation were to be introduced, the price of foam and the store price of post legislation furniture remained within a few per cent of that of pre-regulation furniture. Subsequent to this time furniture and foam costs have risen in line with UK inflation. There have been more than 15 years of experience since the UK government made it mandatory to use ignition resistant constructions in furniture available to consumers, and nearly ten years since it became obligatory to supply foams with higher post-ignition performance. All sectors i.e. the government, the furniture industry, the foam manufacturers and the consumer have coped with these changes with minimal costs and the use of such materials in the UK furniture industry is now accepted. Indeed, the British foam manufacturers actively assist the extension of similar standards to other countries.

Please let me know if I can be of further help.

Yours sincerely,

A. G. Smith

THE MONTEBELLO CONSULTANCY

Mount Pleasant, Oxen Lane, Sovilon, ABERGAVENNY, Gwent NP7 9RY. Tel & Fax: +44 (0)1873 831 186
email esmith@montcons.co.uk WWW http://www.montcons.co.uk

To: Dr. M. Hirschler, GBH International, USA

My ref: MBLET630 **Your ref:**

11 April 2003

Dear Dr. Hirschler,

You asked during our recent conversation that I should summarise the history of the UK furniture and fire regulations. This is my response.

During the period 1963 - 1988 I was employed as Divisional Chief Physicist for the Dunlopillo Division of Dunlop Ltd, at that time one of the U.K.'s largest manufacturers of flexible polyurethane foam. Much of my work had been on behalf of the whole foam industry so that from 1988 to 1990 the British Rubber Manufacturer's Association, which was and is the U.K. organization representing the flexible polyurethane foam industry, retained me as a special consultant. My duties included particular responsibility for furniture fire issues both for the company and the B.R.M.A. I represented the B.R.M.A. in national and the BSI in European and International Standardisation bodies dealing with flammability of furniture. I held chair level appointments in all of these fora. My brief covered not only standards but also testing techniques and foam development. This period included the time during which the U.K. government was preparing for and introduced its furniture flammability regulations.

The first Government regulations controlling the ignitability of domestic furniture came into force at the end of 1982. In the late 1980's when the U.K. government was pursuing a policy of improving the post ignition behaviour of furniture in the U.K. consumer market the technology was therefore well developed for producing match and higher ignition source resistant furniture grade polyurethane foams. Ignitability tests with sources such as the No 5. wooden Crib were passed routinely. All foams supplied for automotive use passed the FMVSS 302 ignitability test. When the then Department of Trade and Industry introduced legislation in 1988 to control post ignition behaviour of furniture the industry was already prepared to introduce CMHR and other technologies and did this with minimum cost penalty. Existing

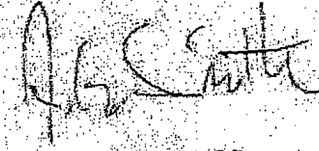
slabstock machinery used for production of furniture grade flexible polyurethane foams required little or no conversion to manufacture these new foams which captured the furniture market. Any equipment changes which were needed were low in cost. At that time upholstery fabrics and mattress covers posed a slightly greater problem but could be made sufficiently resistant using flame retardant or backcoating treatments. These fabric and fibre treatments were also available at that time as were inherently resistant fibres and textiles. The Regulations came fully into force in 1990.

Though it had been stated before the event that the cost of production and foam prices would rise by at least thirty per cent if the 1988 legislation were to be introduced, the price of foam and the store price of post-legislation furniture remained within a few per cent of that of pre-regulation furniture. Subsequent to this time furniture and foam costs have risen in line with UK inflation. This, industry based, assessment of the cost impact of the Regulations is supported by independent research commissioned by the Dept. of Trade and Industry, published in June 2000 as "Effectiveness of the Furniture and Furnishings (Fire) (Safety) Regulations 1988". This report found that the cost of treatment of upholstered furniture was 2.3% to 3.1% of total sales revenue. In 1997 figures, this represented £22.5m to £30m per annum and may be compared with the 1996 allocation, by retailers and manufacturers, of about £34m to the direct advertising of upholstered furniture. This report stated that the benefit/cost ratio was at least 2 for the Regulations and possibly as high as 38 depending on the basis on which savings were estimated.

There have been more than 20 years of experience since the UK government made it mandatory to use ignition resistant constructions in furniture available to consumers, and approaching 15 since it became obligatory to supply foams with higher post-ignition performance. All sectors i.e. the government, the furniture industry, the foam manufacturers and the consumer have coped with these changes with minimal costs and the use of such materials in the UK furniture industry is now accepted. Indeed, the British foam manufacturers actively assist the extension of similar standards to other countries and resist the entry of non-conformant materials and constructions to the UK market.

Please let me know if I can be of further help.

Yours sincerely,



A. G. Smith

EXHIBIT 6

TRANSCRIPT OF DEPOSITION OF

WILLIAM WHITTENBURG

February 2, 2004

CIVIL ACTION NO. 01-CI-03640 JEFFERSON CIRCUIT COURT
DIVISION TWO (2)

SCOTT LOGSDON, INDIVIDUALLY
AND AS ADMINISTRATOR FOR THE
ESTATES OF LESLIE HIBBS, FAITH
HIBBS, DESTINY HIBBS AND FORREST HIBBS
AND
CHRIS MEINHART, PUBLIC ADMINISTRATOR
FOR THE ESTATE OF MELBA HIBBS, A MINOR

VS.

FALCON INTERNATIONAL COMPANY, ET AL

BRITTON-CARDWELL & ASSOCIATES, COURT REPORTERS
Computer-Aided Transcript * Condensed Pages * Discs
710 East 1st North Street, #1, Morristown, TN 37814
(Phone 865-993-2876)
National & State Associations

MR. FOSTER: Okay. I'm going to ask you to view this videotape, if you would, with me.

(All view videotape.)

BY MR. FOSTER:

Q Mr. Whittenburg, I'm going to ask you to assume for the purpose of these questions that that was -- what you saw, the videotape, was a full scale fire test of Berkline Model 480 couch made by your company; all right?

A Yes.

Q Were you surprised by the amount of smoke developed by that fire?

A Not based on what you read to me earlier.

Q If I'd asked you this question yesterday, would you have been surprised by it?

A Yes.

Q Were you surprised by the size of the fire during the later stages of the video?

A No.

Q You knew it would probably be that big if one of your pieces caught on fire?

A If it catches on fire, the whole thing was on fire. That's a big sofa.

Q A lot of fuel for fire?

A It's a big sofa, yes.

Q Did it appear to be dangerous to you?
A Of course, yes.
(Off record.)
(Exhibit No. 22, videotape, marked and retained by counsel.)
(Off record.)
BY MR. FOSTER:
Q Is this acceptable flammability performance in your judgment of your sofa?
A I don't know that that was -- obviously, it's not. I don't know how that sofa was constructed.
Q Okay. Would you be proud to have your name associated with that product in terms of its flammability?
A With that product?
Q Yes.
A Given the fact that somebody walked in and lit it with a torch, no. You wouldn't want anything to burn up like that.
Q I take it your answer is you wouldn't be proud to have your name associated with that product?
A Yes. That's my answer.
Q You would or would not be?
A I would not be.
Q Okay. Having seen that video, if a

EXHIBIT 7

EXHIBIT 8

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF SOUTH CAROLINA
FLORENCE DIVISION

WALLACE GRAHAM and DOROTHY GRAHAM, Plaintiffs, vs. BASSETT FURNITURE INDUSTRIES, INC.; FLEETWOOD HOMES OF GEORGIA, INC.; PHILLIPS, INC.; and PROGRESS ENERGY CAROLINAS, INC., Defendants.	ORAL DEPOSITION OF: MARVIN LEATHERMAN

October 19, 2006
2:07 p.m.
* * *
Taken by the Plaintiffs
Pursuant to Notice

At the Offices of
Bassett Furniture
1111 East 20th Street
Newton, North Carolina

Reported by:
Glenda C. Read, RMR

management. But if this accident could have been avoided if Bassett had simply used a different kind of foam that had fire retardant in it, wouldn't that have been a wise expense for Bassett to make?

A. We don't know that TB-117 would have necessarily stopped that fire.

Q. I'm asking you for the purposes of this question, if that accident could have been avoided if you guys had put TB-117 foam in that sofa, then wouldn't it have been a wise --

A. If that and that alone made the difference in that fire, yes.

MR. DARLING: Object to the form. Go ahead.

A. I'm saying if that alone would have stopped the fire, yes.

Q. Learning a little bit more about the statistics today, do you know more about the fire loss statistics in this country relating to upholstered furniture today than you did before today?

A. I don't understand that question.

Q. We went over some fire loss statistics where we saw how many people were killed and injured as a result of upholstered furniture fires?

A. Right.

Q. Did you learn more today about it than you knew

beforehand?
A. Today?
Q. Yes.
A. No.
Q. So you had this same level of knowledge back in previous years?
A. I knew there were deaths related to furniture fires, yes.
Q. Do you have any concern for the members of the American public who have bought Bassett Furniture which does not contain fire retardant materials in it --
MR. DARLING: Object to the form.
Q. -- for their safety?
MR. DARLING: Objection to the form.
Q. Do you have any concern?
MR. DARLING: Object to the form.
A. Yes, I have concerns.
Q. What have you done before today to address those concerns with the Bassett Furniture?
A. We manufacture all of our products now with the TB-117 foam.
Q. Have you changed the way that you warn your customers at all?
A. No.
Q. You guys made some upholstered furniture that you

Stevenson, Todd

From: Daun Newton [dnewton@fosterfoster.com]

Sent: Tuesday, May 13, 2008 4:26 PM

To: CPSC-OS

Subject: Comments to CPSC on Proposed Rule for the Flammability of Residential Upholstered Furniture

Attachments: CPSC Docs.pdf

Daun C. Newton
Paralegal to Robert P. Foster
Foster Law Firm, L.L.P.
601 East McBee Avenue, Suite 104
Greenville, South Carolina 29601
Telephone: (864) 242-6200
Fax: (864) 233-0290

Stevenson, Todd

From: Judy Levin [judy@cehca.org]
Sent: Tuesday, May 13, 2008 5:09 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: image001.png; image002.png

528 61st Street, Suite A
Oakland, CA 94609

T: 510.594.9864
F: 510.594.9363

ceh@cehca.org
www.cehca.org

May 15, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway, Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

The Center for Environmental Health applauds the excellent work of the Consumer Product Safety Commission in developing the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) without a small open flame standard for foam.

Historically, small open flame standards for foam have been met with a series of toxic chemicals such as pentaBDE and chlorinated tris or chemicals lacking adequate health information such as Firemaster 550. Many of these chemicals are known to migrate out of furniture and are found in dust, humans, pets, wild animals and the environment. In animal studies, a number of these chemicals can cause thyroid abnormalities, endocrine disruption, cancer and adverse neurological and reproductive condition such as reduced sperm count, infertility, hyperactivity and learning disabilities.

While the current smoldering ignition performance standard (SIP standard) for fabrics and other upholstery cover materials is accompanied by fewer risks to human health than a small open flame standard for foam, we are concerned that the SIP standard could be met with potentially toxic fire retardant chemicals such as decabromodiphenyl ether (decaBDE) and hexabromocyclododecane (HBCD) being applied to the back-coating of upholstery fabric to meet this smoldering ignition performance standard.

CPSC should require that **any** manufacturers who use fire retardant chemicals be required to alert CPSC of their use and should be required to specify the exact chemical configurations so that chemicals of concern can be identified. CPSC should also require that any chemical flame retardant

chemicals to be used in any consumer product such as furniture are **fully** tested by the manufacturer for potential human health and environmental effects and evaluated for potential lifecycle impacts **before** they are used in any manner that could result in with exposure to humans. CPSC should then evaluate the results of these studies to determine whether the proposed use of the chemical is appropriate and safe. Manufacturers should also be required to label their products as containing fire retardants so that consumers may make informed purchasing decisions.

The fire statistics show that the use of chemical fire retardants has not lead to a reduction in fire deaths. California is the only state in the United States that has a flammability standard for furniture and children's products (e.g. cribs, infant carriers, etc), yet despite the application of millions of pounds of chemical fire retardants in these products, California has not achieved a greater level of fire safety than those states without these furniture flammability standards. The legacy of these chemicals' use is that California residences have from 3-10 time higher levels of fire retardant chemicals in their homes than anywhere else in the United States. The reduction in fire deaths throughout our country has come from non-chemical answers such as decreases in smoking, fire-safe cigarettes, improved building codes and the increased use of smoke alarms and fire sprinkler systems.

Halogenated fire retardant chemicals are truly chemicals of great concern:

- Halogenated Fire Retardants are persistent, bioaccumulative and toxic. Once they enter our environment there is no known safe way to remove them safely from our environment. Flame retardants such as PBDE's and PCB's have even found their way into pristine and remote areas such as the Artic Circle and infiltrated the marine mammals there.
- There is a lack of adequate toxicity testing on these fire retardant chemicals and the testing that has been done by the U.S. EPA and other unbiased scientist points to areas of concern. There are also huge gaps in the data that is available on these chemicals.
- Halogenated fire retardants also pose dangers to firefighters and first responders because when furniture treated with fire retardants burn, they product dioxins and furans, some of the most potent carcinogens known to science.

We appreciate the Commission's support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of increasing human and environmental exposure to potentially toxic fire retardant chemicals for which there is inadequate health and safety information.

Sincerely,

Judy Levin, MSW
Pollution Prevention Coordinator

Judy Levin
Pollution Prevention Coordinator
Center for Environmental Health
528 61st Street, Suite A
Oakland, CA 94609
510-594-9864 Ext. 316

judy@cehca.org
www.cehca.org

SBA
Office of Advocacy
www.sba.gov/advo

Advocacy: the voice of small business in government

May 13, 2008

The Honorable Nancy Nord, Acting Chairman
U.S. Consumer Product Safety Commission
4330 East West Highway
Room 502
Bethesda, MD 20814

Re: Notice of Proposed Rulemaking, Standard for the Flammability of Residential Upholstered Furniture, 16 CFR 1634

Dear Chairman Nord,

On March 4, 2008, the Consumer Product Safety Commission (CPSC) published in the *Federal Register* a request for comments on its proposed rulemaking titled, Flammability Standards for Residential Upholstered Furniture.[1] The rulemaking indicates that all manufacturers of upholstered furniture will be affected by the proposed rule, and that more than 97 percent of these manufacturers are small businesses.[2] The Office of Advocacy (Advocacy) has been closely following this issue for years, even filing comments on the CPSC's 1998 request for comments concerning the toxicity, exposure, bioavailability, and environmental effects of flame retardant chemicals that may be suitable for use in residential upholstered furniture.[3]

As Chief Counsel for Advocacy, I want to commend the CPSC for the quality and comprehensiveness of its regulatory analysis and discussion of alternatives. I am writing because my office has met with some of the affected small upholstery furniture manufacturers and upholstery fabric manufacturers and their representatives who have voiced concern with the rule. Industry representatives have told Advocacy that they are concerned the rulemaking will have a significant economic impact on their industry, which runs counter to the conclusion reached by the CPSC in its Initial Regulatory Flexibility Analysis (IRFA).[4] These industry concerns primarily involve their view of the CPSC's regulatory policy assumptions as outlined in the rule's preamble and regulatory impact statement, versus what the regulated entities experience daily in the marketplace. Specifically, the small businesses suggest a disparity between CPSC's analysis of the

[1] 73 Fed. Reg. 11,702 (March 4, 2008).
[2] 73 Fed. Reg. at 11,734.
[3] 63 Fed. Reg. 13,017 (March 17, 1998). See Advocacy's comments at: http://www.sba.gov/advo/laws/comments/cpsc98_0428.pdf.
[4] 73 Fed. Reg. 11,735.

total costs and benefits of the rule as contrasted with the industries' belief that the rule's economic impact has been underestimated because the incremental costs are significantly higher than estimated by the CPSC.

I believe there is value to be gained by bringing these small businesses' concerns to the attention of the CPSC in the hope that any disparity between the rule's costs and benefits can be narrowed or resolved.

Advocacy Background

Congress established Advocacy under Pub. L. 94-305 to represent the views of small business before Federal agencies and Congress. Advocacy is an independent office within the U.S. Small Business Administration (SBA); as such the views expressed by Advocacy do not necessarily reflect the views of the SBA, or of the Administration. Section 612 of the Regulatory Flexibility Act (RFA) also requires Advocacy to monitor agency compliance with the RFA, as amended by the Small Business Regulatory Enforcement Fairness Act.[5]

In 2002, President George W. Bush signed Executive Order 13,272 (EO), requiring Federal agencies to implement policies protecting small businesses when writing new rules and regulations.[6] The EO instructs Advocacy to provide comment on draft rules to the agency proposing them, as well as to the Office of Information and Regulatory Affairs of the Office of Management and Budget (OIRA).[7] The Order also requires agencies to give every appropriate consideration to any comments provided by Advocacy.[8] Under the EO, an agency must respond to any written comments submitted by Advocacy regarding a proposed rule when publishing the subsequent final rule in the *Federal Register*, or certify that the public is not served thereby.[9]

I. Upholstery fabric manufacturers disagree with certain assumptions and data relied on by CPSC in its analysis of the rule's impact on their industry.

Advocacy appreciates the detailed information provided by the CPSC in the Preliminary Regulatory Analysis (PRA) describing the products and industries likely affected by this regulation, and the costs associated with the rule.[10] However, it is unclear whether the CPSC has concluded whether upholstery fabric manufacturers and fabric finishers will be directly impacted by this rule. The CPSC's statements as to direct impacts in the PRA appear to be inconsistent with the conclusions reached by the agency in the IRFA. In the IRFA, the CPSC states that, "the proposed standard will also affect manufacturers and finishers of upholstery fabrics and barrier materials used in the production of furniture."

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[5] Pub. L. No. 96-354, 94 Stat. 1164 (1981) (codified at 5 U.S.C. §§ 601-612) amended by Subtitle II of the Contract with America Advancement Act, Pub. L. No. 104-121, 110 Stat. 857 (1996). 5 U.S.C. §612(a).
[6] Exec. Order No. 13,272, § 1, 67 Fed. Reg. 53,461 (Aug. 13, 2002).
[7] *Id.* at § 2.
[8] *Id.* at § 3(c).
[9] *Id.*
[10] 73 Fed. Reg. 11,711.

"Although their products are not directly regulated by the draft proposed standard, it is expected that they will provide guaranties to furniture manufacturers regarding fabric ignition resistance."[11]

Fabric industry representatives believe this issue of direct impacts is important as it relates to the requirements of the RFA. They believe that much of the economic impact of this rule will fall on upholstery fabric manufacturing companies that provide fabric to the furniture manufacturers. The CPSC acknowledges that the rule's costs to furniture manufacturers will be mitigated because they will receive certain guarantees from the fabric industry certifying that the fabrics to be utilized on the upholstered furniture meet the regulation's flammability standards.[12] Fabric upholstery manufacturers believe that the mitigated costs afforded to the furniture manufacturers will come directly from them increasing their costs.

Advocacy believes that despite the apparent inconsistency between the PRA and the IRFA on this point, it is clear that the rule will have a direct economic impact on upholstered furniture manufacturers. Under such circumstances, the RFA requires the CPSC to analyze the rule's impacts on these directly regulated entities in the IRFA. While the IRFA, along with the PRA, does a good job of discussing how the rule is expected to effect small businesses, the fabric upholstery industry believes that the IRFA would be improved if CPSC better appreciated how certain requirements and costs (direct and incremental) associated with the rule will impact their industry. Based on discussions with affected fabric industry representatives, Advocacy would like to provide the CPSC with the following information that may be of use as the agency finalizes this regulation.

- **The CPSC should refine its estimate of the small business entities that will be affected by the rule.**

Upholstery fabric industry sources indicate that the CPSC has overestimated that number of fabric manufacturers that are likely to be affected by this rule. The CPSC estimates that 100 to 200 domestic manufacturers derive a significant share of their revenues from fabric they produce or import for residential upholstered furniture.[13] Fabric representatives estimate that there are approximately twelve upholstery fabric manufacturers in the United States that produce the majority of all upholstery in the country which would be subject to the testing standards in this rule, all of which are considered small under SBA size standards.[14] With the increased costs necessary to comply with the regulation, the rule will have an enormous economic impact on the upholstery fabric manufacturers, a fact that seems to have been underestimated by the CPSC. Since there appear to be so few fabric manufacturers currently doing business in the United States, the CPSC's analysis of the industry takes on added importance. If the costs of compliance with rule prove too onerous, many of the fabric manufacturers may

[11] 73 Fed. Reg. at 11,734.
[12] *Id.*
[13] 73 Fed. Reg. at 11,738.
[14] Information obtained from the National Textile Association.

cease to operate in the marketplace. The fragility of the fabric manufacturing industry is not lost on the CPSC as it noted in the rule that recent bankruptcies, buy-outs and foreign competition has shaken the U.S. industry.[15]

This unintended consequence may have a significant impact on the furniture manufacturing business in the United States. Advocacy suggests that the CPSC reconsider the number of small upholstery fabric manufacturers and fabric finishers that will be affected by this rule as required by the RFA and how that information relates to the rule's impact on the industry.

- **Industry sources suggest that the CPSC has underestimated the true costs of this rule on upholstery fabric manufacturers.**

Advocacy is concerned by the assumptions in the IRFA that fabric testing for compliance with this rule will be relatively inexpensive, and that these tests will be performed by fabric manufacturers who will provide furniture manufacturers with a guarantee that the fabrics comply with the flammability standards.[16] The CPSC also assumes that costs to upholstery fabric manufacturers will be reduced because most of the fabrics that fall under the new flammability standards already comply with the standards that exist under the Upholstered Furniture Action Council (UFAC) voluntary industry program of cigarette ignition tests developed in the 1970s.[17] The fabric manufacturers assert that the CPSC has underestimated many of the incremental costs of the rule and therefore the CPSC's conclusion that the regulation's impact on their industry is minimal is misplaced.

While the CPSC assumes in the rule that Class I fabrics will pass the new flammability standard, industry representatives have noted that some CPSC employees have suggested that all UFAC Class I fabrics will not pass the new test. Therefore, a responsible upholstery fabric manufacturer must assume that they will have to test each fabric irrespective of its class in order to assure that the fabric passes the new flammability standard.

While upholstery fabric manufacturers have decades of experience with the voluntary testing procedures under the UFAC standards, no one has experience with the new testing procedures under this rule. Small furniture manufacturers and fabric manufacturers directly regulated by the rule are likely to either bear the costs of testing fabric for compliance, or utilize the option of employing barrier materials in the furniture when complying with this rule. One fabric manufacturer told Advocacy that it creates approximately 900 new styles of fabric per year and that the company has approximately 3000 fabrics currently in use. Even using the CPSC's estimate of $50 per test, the cost of

[15] 73 Fed. Reg. at 11,711.
[16] 73 Fed. Reg. at 11,734.
[17] 73 Fed. Reg. at 11,735.

testing the majority of these fabrics will be prohibitive for the industry. Industry representatives indicate that barrier material is more likely to be used in smaller production, more expensive, furniture. Therefore, the increased cost of using barrier material will likely be absorbed by small specialty furniture manufacturers further increasing the impact of this rule on small businesses.

Many small textile mills have neither the staff to perform the required tests, nor the funds to outsource such testing, as they operate on small revenue margins.[18] If the majority of fabric manufacturers choose to test a large number of fabrics the commercial testing facilities will soon be overwhelmed, adding to production times for furniture; also, the price of testing the fabrics will likely increase with the increased demand for testing.

Advocacy urges the CPSC to review the costs of fabric testing under this rule and to entertain additional alternatives that will minimize the cost of fabric testing on fabric manufacturers or other related industries.

II. The CPSC's cost measurement data may be too restrictive and may hinder an appropriate analysis of small business impacts.

Advocacy is concerned that the IRFA measures the economic impact of the rule in terms of cost-per-unit-of-cloth and cost-per-piece-of-furniture, rather than measuring or estimating the overall cost borne by a typical small enterprise.[19] Large enterprises generally have advantages over small businesses in terms of reducing these costs, whether by negotiating discounted prices for bulk purchases, by outsourcing the expensive, labor-intensive steps of production that small businesses can only feasibly perform themselves, or by the ability to benefit from economies of scale by spreading the fixed costs of compliance over a greater volume of sales. If the IRFA does not use the individual business enterprise as the basis of its analysis, it is not possible to develop an accurate measure the impact of the rule on a typical small business, or to determine whether or not the costs of a rule are borne disproportionately by small businesses.

Advocacy is also concerned that the IRFA assumes that costs incurred by furniture manufacturers can be passed on to residential consumers.[20] The IRFA does not provide data to support this conclusion. Affected small businesses may find that cost pass-through to the end user is problematic in economically inelastic product and service markets; the IRFA should provide justification for discounting costs in this manner. Advocacy urges the CPSC to include and explain the basis for these assumptions in its Final Regulatory Flexibility Analysis (FRFA) to be published in the final rule as this will result in a more transparent discussion of the actual costs to be incurred by the affected industries.

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[18] David Ryan, Director of Quality, Craftex Mills (representing the National Textile Association Upholstery Fabric Committee.), Remarks at the American Home Furnishings Alliance's 16th Annual Flammability Workshop (Mar. 20, 2008).
[19] 73 Fed. Reg. at 11,734-38.
[20] *Id.* at 11,735-36.

In 2005, the American Home Furnishings Alliance, the National Home Furnishings Association, and the Upholstered Furniture Action Council jointly commissioned an economic study[21] of the CPSC's Draft Standard for Upholstered Furniture Flammability.[22] Advocacy urges the CPSC to address in the final rule the issues the study raises with regard to those cost measurements in the draft that the CPSC retained for use in the IRFA.

III. The CPSC should consider additional alternatives to the proposed rule.

Pursuant to section 603 of the RFA, an IRFA must consider any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities.[23] While Advocacy commends the CPSC for the discussion of alternatives contained in the IRFA,[24] Advocacy wishes to bring to CPSC's attention other alternatives suggested by industry representatives:

- **The use of reduced ignition propensity cigarettes may serve to reduce the need for this regulation.**

The relevant statute upon which this regulation rests is the Flammable Fabrics Act (FFA). The FFA's objective is to "protect the public against unreasonable risk of the occurrence of fire leading to death or personal injury, or significant property damage."[25] The CPSC states that this proposed rule is intended to fulfill that objective by reducing the risk of fire from smoldering ignition of furniture.[26] The CPSC's research indicates that the cause of smoldering ignition is "almost always cigarettes."[27] Yet, the CPSC also admits that reduced ignition propensity (RIP) cigarettes that will reduce the probability of igniting upholstered furniture are expected to increase in popularity.[28] However, the CPSC does not address the role of RIP cigarettes in reducing furniture flammability. Industry representatives told Advocacy that R.J. Reynolds Tobacco Company and Liggett Group have indicated that they will convert their entire line of cigarettes to the self-extinguishing type during 2009, and that other cigarette manufacturers are also moving that direction. This alternative gains credibility because the regulation requires that fabric testing be done using Pall Mall cigarettes as the ignition source, but R. J. Reynolds is phasing those cigarettes out in 2009.

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[21] Mark P. Berkman, An Evaluation of the CPSC Staff Preliminary Regulatory Analysis of the Draft Upholstered Furniture Flammability Standard (Charles River Assoc.'s Int'l, Mar. 2, 2006). *Available at* http://www.ahfa.us/uploads/documents/flammreportmarch06.pdf (accessed Apr. 15, 2008).
[22] *CPSC Draft Standard for Upholstered Furniture Flammability*, Description of Draft Standard Performance Test Requirements, Working Draft, May 2005.
[23] 5 U.S.C. § 603(c).
[24] 73 Fed. Reg. at 11,735-11,737.
[25] Flammable Fabrics Act, 15 U.S.C. § 1193(a) (1953).
[26] 73 Fed. Reg. at 11,705.
[27] 73 Fed. Reg. at 11,704.
[28] 73 Fed. Reg. 11,707.

The upholstered furniture industry suggests that RIP cigarettes should play a vital role in any federal upholstered furniture flammability standard. Data from the National Fire Prevention Association and the Coalition for Fire Safe Cigarettes indicate that 45 out of 50 States have either adopted, or are moving towards, legislation that will require use of fire-safe cigarettes.[29] While the CPSC acknowledges that it is studying the reduction in smoldering ignition propensity in relation to RIP cigarettes, this information may serve to substantially obviate the need for this regulation.

- **The CPSC should consider allowing the use of non-silicone treated polyester fiberfill as an alternative.**

The CPSC admits that, "most furniture covered with fabrics that would benefit most from a barrier of polyester fiberfill over urethane foam is already manufactured in that way."[30] However, the CPSC does not acknowledge that the use of fiberfill in the mandatory fabric test for Type 1 furniture would be beneficial in reducing flammability of upholstered furniture. Industry sources suggest that the CPSC should add a second fabric test for Type 1 furniture consisting of non-silicone treated polyester fiberfill placed between the polyurethane foam and the cover fabric. This alternative would allow for more decorative woven upholstery fabrics to pass the upholstery flammability standard which would allow the fabrics to be used in Type 1 furniture.

- **Reduced deaths from smoldering cigarettes coupled with the States requiring the use of fire-safe cigarettes may mitigate the public policy concerns of this rule.**

While it is often Advocacy's position that "pursuing no rule"[31] is generally not considered a reasonable alternative under the requirements of section 603(c) of the RFA, the CPSC may want to study whether the public policy underlying the rule continues to be warranted. Currently, deaths caused by cigarette ignition of upholstered fabric are trending down; from 1350 in 1978 to 280 in 2002 to 2004.[32] Reduced deaths, coupled with advancements in self-extinguishing cigarettes may serve to mitigate the deaths and injuries addressed by public policy underlying the rule.

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[29] Eleven States have legislation that has become effective; 17 States have passed legislation; 6 States have filed legislation that carried over from 2007; and 11 States have filed legislation in 2008. See: www.nfpa.org/gallery/FSC_2map2.htm.

[30] 73 Fed. Reg. at 11,736.

[31] 73 Fed. Reg. at 11,737.

[32] The data for the years 2002 to 2004 can be located at http://www.cpsc.gov/library/fire04.pdf and the data for 1995 can be located at http://www.cpsc.gov/library/datafire.html.

Conclusion

It is my hope that the CPSC takes these comments into consideration while drafting the final rule establishing a flammability standard for upholstered furniture. Advocacy appreciates being given a chance to provide the CPSC with these comments. If you have any questions or concerns, please do not hesitate to contact me or Assistant Chief Counsel Linwood Rayford at (202) 401-6880, or via e-mail at linwood.rayford@sba.gov.

Sincerely yours,

Thomas M. Sullivan
Chief Counsel Advocacy

Linwood L. Rayford, III
Assistant Chief Counsel for Food, Drug and Health Affairs

Daniel G. Donahue
Mercatus Fellow

cc: The Honorable Susan Dudley, Administrator, Office of Information and Regulatory Affairs

Patricia Hirschler
76-12 35th Ave, Apartment 5E
New York, NY, 11372
Tel: (617) 817-4611
e-mail: celeching@yahoo.com

41

Comments on CPSC Upholstered Furniture Flammability Recommendations

I am writing with regards to my concerns about the Consumer Product Safety Commission's fire safety regulation of upholstered furniture. I strongly believe that the proposed 16 CFR 1634, from the Notice of Proposed Rulemaking (Federal Register / Vol. 73, No. 43 / Tuesday, March 4, 2008 / Proposed Rules) is unlikely to be successful in improving the fate of our first responders when they are called upon to help us in the event of a fire.

I work with firefighters on a regular basis and have a strong concern for their safety, as some of the worst, fatal fires are often those that start with, or soon spread to, upholstered furniture. I also know that thousands of people have died (and many more have been injured) from fires that have involved upholstered furniture and that many of those deaths and injuries were preventable. I have frequently been told that upholstered furniture sold in England is much less likely to burn and will spread fires much more slowly than our furniture here. This is the result of laws that have been in place in England for many years that require the foams in English furniture to pass fire tests that start with flames. Based on this information, CPSC needs to take more action than proposing to require only tests with cigarettes and not with matches, lighters or candles.

I hope CPSC will change its mind and generate meaningful regulation that will protect us.

Thank you for your time and attention to this very important safety matter.

Sincerely,

Patricia Hirschler

Stevenson, Todd

From: Patty Tang [celeching@yahoo.com]
Sent: Wednesday, May 14, 2008 1:15 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR

Attachments: Patricia Hirschler to CPSC May 08.doc

Patricia Hirschler to CPSC May...

Patricia Hirschler
76-12 35th Ave, Apartment 5E
New York, NY, 11372
Tel: (617) 817-4611
e-mail: celeching@yahoo.com

Comments on CPSC Upholstered Furniture Flammability Recommendations

I am writing with regards to my concerns about the Consumer Product Safety Commission□s fire safety regulation of upholstered furniture. I strongly believe that the proposed 16 CFR 1634, from the Notice of Proposed Rulemaking (Federal Register / Vol. 73, No. 43 / Tuesday, March 4, 2008 / Proposed Rules) is unlikely to be successful in improving the fate of our first responders when they are called upon to help us in the event of a fire.

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I hope CPSC will change its mind and generate meaningful regulation that will protect us.

Thank you for your time and attention to this very important safety matter.

Sincerely,

Patricia Hirschler

42

April 14, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Dear Chairwoman Nord:

As a former nurse, safety is up-most in my mind. I understand from several reports that in November of last year, the CPSC allowed removal of flame retardants from the foam in residential furniture.

It is only common sense that the furniture purchased by the public is safe and meets safety standards. But now, I am concerned with this new information, as it will cause potential harm for all Americans.

There is no question that chemical flame retardants have decreased fire-related residential deaths.

Please review your recent actions in reference towards fire safety standards on residential furniture. Safety is paramount and that is the reason why the CPSC should reconsider this issue of fire safety.

Sincerely,

Gwen Norton
4301 Garfield St.
Anchorage, Alaska 99503

43

Stevenson, Todd

From: Stacy Sikora [stacy.sikora@gmail.com]
Sent: Wednesday, May 14, 2008 12:56 AM
To: CPSC-OS
Subject: Consumer Product Safety Commission

May 13, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

I am writing to express my apprehension with the direction the CPSC is moving towards in response to fire safety standards on residential furniture. Recently I was made aware of your proposal for fire safety standards through the Citizens for Fire Safety coalition, and I was shocked by the direction the CPSC is taking.

As a mother of young children, their safety is always on my mind. Not only do I teach my children the importance of safety, especially fire-safety but I also remain informed of the safety standards being used on the products I bring into my house. I expect that the products I purchase for my home meet the highest safety standards available. The highest fire safety standards should not be a luxury, but instead a mandate on all residential furniture. I should not have to worry about the dangers of a fire-related injury because the furniture I purchased does not meet the highest fire safety standards available. Your proposal however, does not require products to be manufactured completely flame retardant and would lessen the existing fire safety standards. The current flame retardant standards pose very little risk to individuals, while providing maximum protection during a fire related incident.

I would expect the CPSC to be working on my behalf to ensure my family remains safe from fire-related injuries by setting a precedent for completely flame retardant furniture. I am asking you to please reconsider and revise your proposal in order to develop a precedent for the highest fire safety standards.

Sincerely,

Stacy Sikora
403 W. Howe
Seattle, WA 98119

Stevenson, Todd

From: Joe Zicherman [joe@fcafire.com]
Sent: Thursday, May 15, 2008 3:42 PM
To: CPSC-OS
Subject: 16 CFR 1634 - Comments on Proposed rule of 3 4 2008

Attachments: 5 15 08 JZ CPSC letter.pdf; 11 05 Final Article from ATLA November Issue.pdf; JZ letter to CPSC re Furniture Flammibility 10-9-2001.pdf


5 15 08 JZ CPSC letter.pdf (33...


11 05 Final Article from ATLA ...


JZ letter to CPSC re Furniture...

To Whom It May Concern:

My comments on Proposed rule for 16 CFR 1634 follow below in this e-mail. I have also attached a digitally signed pdf copy of those comments for the docket as well as two other related .pdf items.

Please confirm receipt of these items.

Joseph B. Zicherman, Ph.D., SFPE

May 15, 2008

To: Office of the Secretary.
Consumer Product Safety Commission.
4330 E. West Hwy.
Bethesda, MD 20814

Subject: Comments on:

16 CFR Part 1634
Standard for the flammability of residential upholstered furniture -proposed rule
Thursday, March 4, 2008 and Thursday, March 4, 2008

To whom it may concern:

I am a fire scientist, who has worked in the area consumer product flammability for 30 plus years. I have worked with the Consumer Product Safety Commission from time to time, in several areas These areas include the subject area - flammability properties of upholstered furniture.

Some years ago, in October 2001, I commented on this same subject area - flammability properties of upholstered furniture - to the Commission. At that time I stressed the importance of heat release properties of these furniture items as when uncontrolled, this property has been demonstrated to be responsible for deaths, and high levels of injuries and property damage.

Along with that communication to the Commission I provided videotapes of standardized fire testing of upholstered cushioned furniture one type or another available at the time. I stressed the fact that many of these were capable of causing large enough fires when ignited in most residential circumstances, to lead to post-flashover fire conditions.

A copy of that letter and the response from the Commission prepared by Dale Ray (January 15, 2002) are attached to this e-mail communication for reference purposes.

I have reviewed the current proposed rule, and I am both surprised and disappointed in its contents. I am surprised in that essentially the single regulatory approach proposed is

to regulate ignition as prescribed in the proposed rule.

I am disappointed because the proposed rule will foreseeably allow upholstered cushioned furniture to be sold which will have modest - and questionable - ignition resistance while at the same time will not be regulated in any way for potential levels of heat release properties such items can create when sustained ignitions occur.

Why do I stress the importance of heat release properties? Currently,these well defined engineering properties are consistently considered to be the most reliable engineering property upon which the fire hazard of any product or scenario can be judged. Yet, the proposed rule does not in any way address characterization and regulation of heat release properties of the upholstered furniture items it would seek to regulate.

In lay terms, the threat posed by high rates of heat release can be described in this way: There is no single item or group of items - other than upholstered furniture that in my experience will consistently produce large amounts of heat, combustion gases and smoke when ignited during routinely foreseeable residential fire scenarios.

Similar comments could have been be made about [currently unavailable] mattresses until recently. Now however, under 16 CFR 1633, the CPSC is regulating the heat release of every new mattress sold in the US, with the cooperation of the mattress manufacturing industry.

It is a wonder to me - for this reason alone - that the Commission is considering anything but regulating furniture based on heat release. This is particularly true in that the furniture industry uses very similar cushioning technology to that found in the mattress industry, and the cushioning materials used in both industries is primarily responsible for high rates of heat release seen when the products they manufacture ignite if not controlled for HRR properties..

I believe that there three important areas need to be addressed primarily in regards to the regulation of flammability and fire performance of cushioned upholstered furniture.

These are all addressed in your proposed rulemaking package to one degree or another and my comments below consider and critique the CPSC view as recently published as part of this rulemaking process. These areas are as follows:

1. Fire Performance - Determining and characterizing the fire performance and potential hazards of upholstered cushioned furniture include important components that are related to both (a.) ignition resistance and (b.) heat release related properties.

The proposed rule attempts to address ignition resistance and I do not take issue with the findings in general. However, I do believe that testing of individual components/mockups may lead to false or inaccurate findings in certain cases.

However, by ignoring the second area - heat release related properties of the cushioning materials used in particular and/or combinations of padding and upholstery, the proposed rule ignores the threat that such furniture poses when indeed it does ignite. This is particularly important when the furniture is not the initial item subjected to a potential ignition scenario but rather a second or third item subjected to a foreseeable growing fire in a residential environment. I have seen and can document countless such fire scenes, where personal injuries, death and large property losses are common because of the heat load provided by upholstered furniture,

I believe the proposed rule falls short of what is needed in contrast to the caveats of 16 CFR 1633, which provide clear guidance as to appropriate regulation in this area.

2. Fire incidence - As part of the justification for the proposed rule, the March 4, 2008 CPSC proposed rule text suggests that numbers of deaths, injuries and property damage caused by furniture fires are far lower than my experience with this problem on the ground and that these numbers do not justify extensive regulation.

In reviewing the data presented, numbers of deaths listed in some of the year's cited appear to me to be far lower than my own personal experience with the outcome of such fires and my own experience cannot represent more than a fraction of those losses

nationwide.

I know for example, that fire incidence data collected at the local level does not note or record the impact of large fuel packages as provided by currently available upholstered cushioned furniture. In particular, the effects of such items are never [quantitatively or qualitatively] noted when the same items are not identified as the "first item ignited" in a given fire incident. Here in California as well, I note that the CFIR's fire incident reporting system does not make provision for reporting such information with any degree of accuracy. In addition, data compilation for such information - when it is gathered - is essentially random at best and the population base for California's information that has gone largely unrecorded is in excess of 30 million people!

For these reasons I have very serious questions regarding the fire incidence data on which the proposed rule is purportedly based.

3. Cost-benefit issues - The proposed rulemaking document suggests that regulating beyond the small open flame ignition testing recommended will not provide cost benefits. Because of flawed gathering of fire incidence data - commented on above - serious or competent calculation of the true costs of excessively flammable upholstered furniture have not been identified in the current analysis.

Conversely, for the manufacture of mattresses, which essentially utilize the same technology as furniture, the fact that 16 CFR 1633 exists and has been on the books for sometime now tells us that regulation of heat release properties of such furniture is certainly not an undue burden for industry and provides needed societal cost benefits.

Another area of societal import not noted in the Commissions package is the impact which the proposed regulation could potentially have on upholstered furniture products liability litigation. I have been involved in such litigations thru the years as a technical expert and I believe they are wasteful. I also believe that furniture manufacturers will not produce technically achievable safe furniture unless the Commission provides needed regulations. I have attached some published comments I have made with a colleague on the subject of flammability of currently available upholstered furniture for the commissions review.

I hope the commission will consider my comments. I note that in Mr. Ray's response to my letter of 2002 to the Commission about this subject, he noted the following:

> "The CPSC staff will consider all reasonable technical approaches. As we continue to work toward reducing the risk to consumers associated with upholstered furniture fires."

Codification of the mattress standard in the interim - since our earlier exchange of correspondence - provides ample basis to describe the regulation of heat release properties as a ".. reasonable technical approach" to address the problem of fire performance of currently available upholstered furniture. Regulation of heat release related properties should be re-considered by the Commission and included in the proposed rule.

I thank you for your interest and would be happy to visit with the committee staff to further assist in their deliberations should I be requested to do so.

Very truly yours,

Joseph B. Zicherman, Ph.D, SFPE
Fire Cause Analysis
935 Pardee Street
Berkeley, CA 94710-2623
(510) 649 1300
(510) 649 3099 Fax

For general information about Fire Cause Analysis - please go to www.fcafire.com

Att: .pdf copies of 2002 CPSC - FCA - JZ Correspondance (2 items)
Journal Article - "Is there a time bomb in my sofa?"
Pdf copy of this letter.

Joseph B. Zicherman, Ph.D, SFPE
Fire Cause Analysis
935 Pardee Street
Berkeley, CA 94710-2623
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(510) 649 3099 Fax

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May 15, 2008

To: Office of the Secretary.
Consumer Product Safety Commission.
4330 E. West Hwy.
Bethesda, MD 20814

Subject: Comments on:

16 CFR Part 1634
Standard for the flammability of residential upholstered furniture -proposed rule
Thursday, March 4, 2008 and Thursday, March 4, 2008

To whom it may concern:

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Some years ago, in October 2001, I commented on this same subject area - flammability properties of upholstered furniture - to the Commission. At that time I stressed the importance of heat release properties of these furniture items as when uncontrolled, this property has been demonstrated to be responsible for deaths, and high levels of injuries and property damage.

Along with that communication to the Commission I provided videotapes of standardized fire testing of upholstered cushioned furniture one type or another available at the time. I stressed the fact that many of these were capable of causing large enough fires when ignited in most residential circumstances, to lead to post-flashover fire conditions.

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I am disappointed because the proposed rule will foreseeably allow upholstered cushioned furniture to be sold which will have modest – and questionable - ignition resistance while at the same time will not be regulated in any way for potential levels of heat release properties such items can create when sustained ignitions occur.

Why do I stress the importance of heat release properties? Currently,these well defined engineering properties are consistently considered to be the most reliable engineering

property upon which the fire hazard of any product or scenario can be judged. Yet, the proposed rule does not *in any way* address characterization and regulation of heat release properties of the upholstered furniture items it would seek to regulate.

In lay terms, the threat posed by high rates of heat release can be described in this way: There is no single item or group of items - other than upholstered furniture that in my experience will consistently produce large amounts of heat, combustion gases and smoke when ignited during routinely foreseeable residential fire scenarios.

Similar comments could have been be made about [currently unavailable] mattresses until recently. Now however, under 16 CFR 1633, the CPSC is regulating the heat release of every new mattress sold in the US, with the cooperation of the mattress manufacturing industry.

It is a wonder to me - for this reason alone - that the Commission is considering anything *but* regulating furniture based on heat release. This is particularly true in that the furniture industry uses very similar cushioning technology to that found in the mattress industry, and the cushioning materials used in both industries is primarily responsible for high rates of heat release seen when the products they manufacture ignite if not controlled for HRR properties..

I believe that there three important areas need to be addressed primarily in regards to the regulation of flammability and fire performance of cushioned upholstered furniture.

These are all addressed in your proposed rulemaking package to one degree or another and my comments below consider and critique the CPSC view as recently published as part of this rulemaking process. These areas are as follows:

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However, by ignoring the second area - heat release related properties of the cushioning materials used in particular and/or combinations of padding and upholstery, the proposed rule ignores the threat that such furniture poses when indeed it does ignite. This is particularly important when the furniture is not the initial item subjected to a potential ignition scenario but rather a second or third item subjected to a foreseeable growing fire in a residential environment. I have seen and can document countless such fire scenes, where personal injuries, death and large property losses are common because of the heat load provided by upholstered furniture,

I believe the proposed rule falls short of what is needed in contrast to the caveats of 16 CFR 1633, which provide clear guidance as to appropriate regulation in this area.

2. Fire incidence - As part of the justification for the proposed rule, the March 4, 2008 CPSC proposed rule text suggests that numbers of deaths, injuries and property damage caused by furniture fires are far lower than my experience with this problem on the ground and that these numbers do not justify extensive regulation.

In reviewing the data presented, numbers of deaths listed in some of the year's cited appear to me to be far lower than my own personal experience with the outcome of such fires and my own experience cannot represent more than a fraction of those losses nationwide.

I know for example, that fire incidence data collected at the local level does not note or record the impact of large fuel packages as provided by currently available upholstered cushioned furniture. In particular, the effects of such items are never [quantitatively or qualitatively] noted when the same items are not identified as the "first item ignited" in a given fire incident. Here in California as well, I note that the CFIR's fire incident reporting system does not make provision for reporting such information with any degree of accuracy. In addition, data compilation for such information - when it is gathered - is essentially random at best and the population base for California's information that has gone largely unrecorded is in excess of 30 million people!

For these reasons I have very serious questions regarding the fire incidence data on which the proposed rule is purportedly based.

3. Cost-benefit issues - The proposed rulemaking document suggests that regulating beyond the small open flame ignition testing recommended will not provide cost benefits. Because of flawed gathering of fire incidence data - commented on above - serious or competent calculation of the true costs of excessively flammable upholstered furniture have not been identified in the current analysis.

Conversely, for the manufacture of mattresses, which essentially utilize the same technology as furniture, the fact that 16 CFR 1633 exists and has been on the books for sometime now tells us that regulation of heat release properties of such furniture is certainly not an undue burden for industry and provides needed societal cost benefits.

Another area of societal import not noted in the Commissions package is the impact which the proposed regulation could potentially have on upholstered furniture products liability litigation. I have been involved in such litigations thru the years as a technical expert and I believe they are wasteful. I also believe that furniture manufacturers will not produce technically achievable safe furniture unless the Commission provides needed regulations. I have attached some published comments I have made with a colleague on

the subject of flammability of currently available upholstered furniture for the commissions review.

I hope the commission will consider my comments. I note that in Mr. Ray's response to my letter of 2002 to the Commission about this subject, he noted the following:

> "The CPSC staff will consider all reasonable technical approaches. As we continue to work toward reducing the risk to consumers associated with upholstered furniture fires."

Codification of the mattress standard in the interim - since our earlier exchange of correspondence - provides ample basis to describe the regulation of heat release properties as a ".... reasonable technical approach" to address the problem of fire performance of currently available upholstered furniture. Regulation of heat release related properties should be re-considered by the Commission and included in the proposed rule.

I thank you for your interest and would be happy to visit with the committee staff to further assist in their deliberations should I be requested to do so.

Very truly yours,

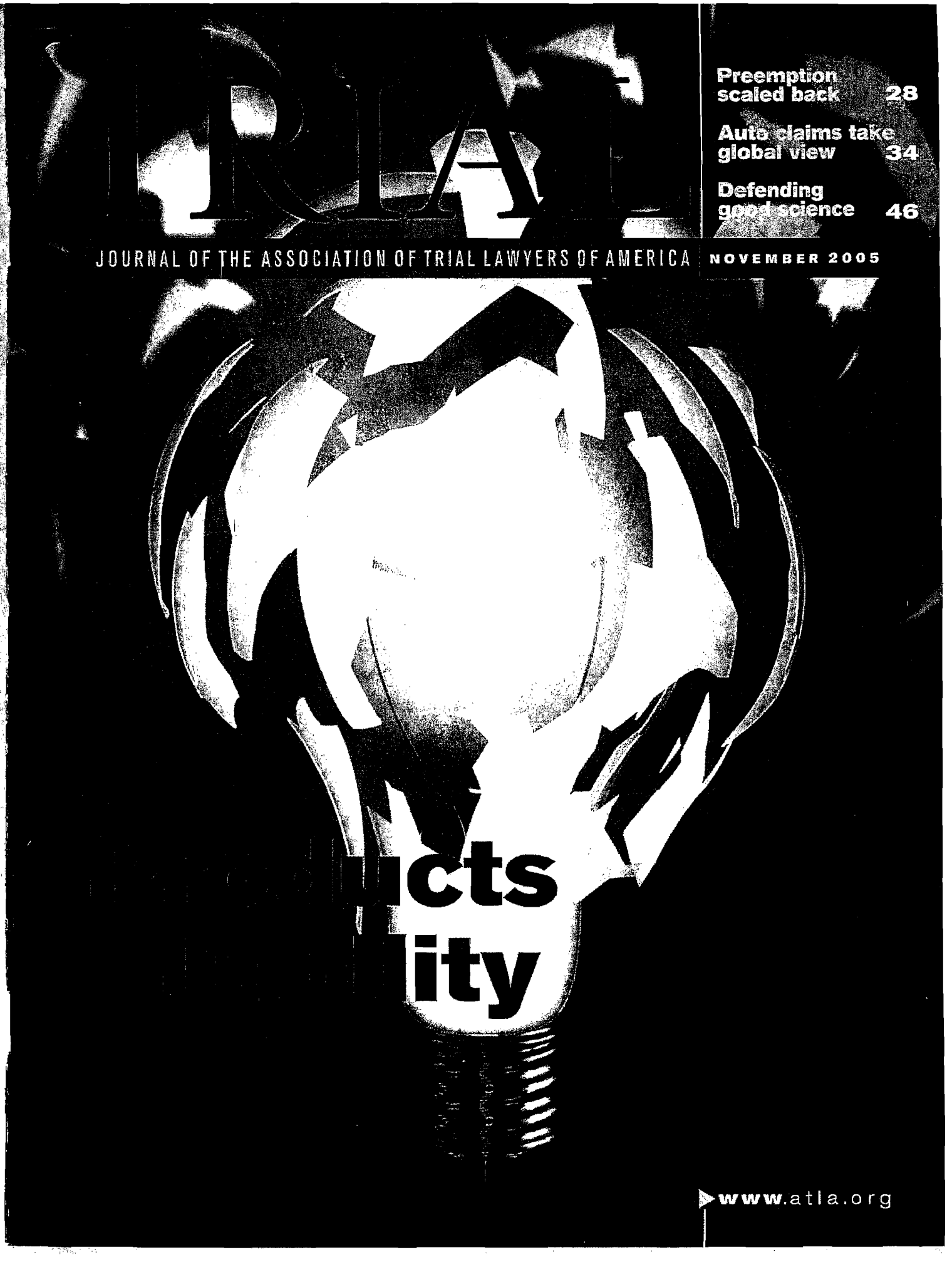
Joseph B. Zicherman

Digitally signed by Joseph B. Zicherman
DN: CN = Joseph B. Zicherman, C = US, O = Fire Cause Analysis
Date: 2008.05.15 12:38:48 -07'00'

Joseph B. Zicherman, Ph.D, SFPE
Fire Cause Analysis
935 Pardee Street
Berkeley, CA 94710-2623
(510) 649 1300
(510) 649 3099 Fax

For general information about Fire Cause Analysis - please go to www.fcafire.com

Att: .pdf copies of 2002 CPSC – FCA – JZ Correspondance (2 items)
Journal Article – "Is there a time bomb in my sofa?"
Pdf copy of this letter.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Is there a time bomb in the sofa?

ROBERT P. FOSTER AND JOSEPH B. ZICHERMAN

Upholstered furniture can turn a small fire into a life-threatening blaze in minutes. Although the problem of furniture flammability is well known to manufacturers, most consumers remain unaware of its magnitude.

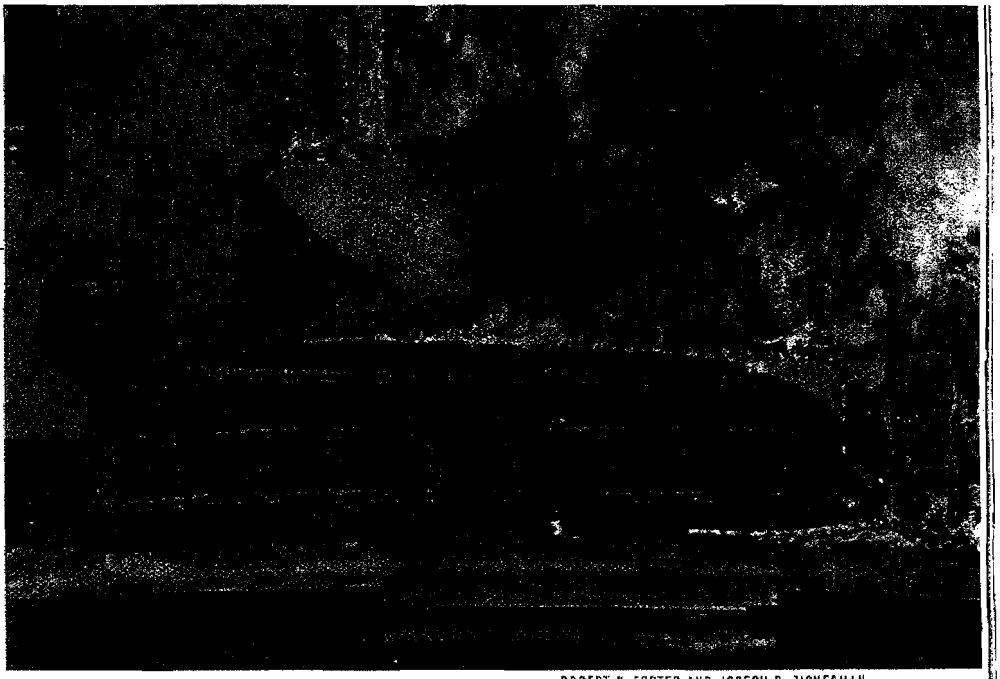
The scenario is all too frequent and invariably tragic. Small children are naturally attracted to fire. An unsupervised child, playing with a lighter or matches, ignites the couch in the family den, then runs and hides.[1] In just two or three minutes, the room becomes untenable; fire then fills the room in a condition called flashover,[2] which no one can survive. Almost immediately, the fire spreads rapidly to other parts of the home, where occupants often are seriously injured or killed.

This is a worst-case scenario, but sadly, it is not unusual. Dwellings are especially vulnerable to fire hazards because of furniture that can ignite easily, regardless of how a fire starts. Statistical and fire incidence data indicates that the home is where people are most likely to experience a serious fire.[3]

In the presence of an ignition source, a fire is more likely to start or spread in a home that has furniture cushioned with polyurethane foam. And yet this material is used in nearly all upholstered furniture sold in the United States. It is a petroleum-based product that has some of the same combustion characteristics as gasoline and kerosene. Unmodified, it ignites readily and burns vigorously when exposed to a small ignition source, giving off huge volumes of dense black smoke that contains toxic gases. It also consumes available oxygen as it burns, which further threatens people in the home.

Foam manufacturers have long issued explicit written warnings of these properties to furniture makers,[4] but the makers do not convey these warnings meaningfully to consumers, probably because such warnings would cause furniture sales to decline.

Other furniture components contribute to the problem as well. Some fabrics perform better than others in the presence of small, open-flame ignition sources such as matches and lighters. Some ignite easily and spread flame rapidly or accelerate smoldering in the presence of burning cigarettes. Polyester fiber used in seat backs may initially melt



ROBERT P. FOSTER AND JOSEPH B. ZICHERMAN

This photo was taken between four and five minutes after ignition, during a test the authors conducted in a case.

away from flame but then burn rapidly and create a liquid "pool fire," which then flows into and ignites surrounding materials.

Why is upholstered furniture so dangerous? If a sofa in an average-sized family den (8 feet by 12 feet, for example) ignites, the fire in that room will reach a heat-release level of several million watts of energy in less than four minutes. The room typically reaches the point of flashover when the fire approaches 800,000 to 1 million watts of energy. So in this example, where does the rest of the energy—2 million to 3 million watts—go? It goes elsewhere in the home and creates untenable conditions far from the room the sofa is in.

The heat and smoke produced are lethal, and the speed with which they spread makes the situation even more deadly. Extensive literature confirms this effect of burning furniture.[5] Furniture need not perform so poorly, but most cushioned furniture available for purchase today will perform this way in a fire.

Furniture can be made reasonably safe with feasible, commercially available materials and designs at reasonable cost. Some furniture-covering materials such as wool, leather, modacrylics, and PVC vinyl typically perform adequately without retardants. Fire barrier materials, designed to go between the fabric and highly flammable foam to delay ignition, have been produced for decades and can be incorporated into furniture for a modest increase in cost.[6]

Methods to treat filling materials such as polyurethane foam, polyester fiber, and cotton with fire retardants have long been available.[7] Certain design options in upholstered furniture construction also can help minimize flammability.[8] For example, manufacturers can use less of the most flammable foam materials by making cushions with a layer of fire-retardant foam or padding (also known as an interliner) that wraps around the highly flammable foam core.

Standards

It has been well known for years that cushioned furniture manufactured with conventional polyurethane foam routinely causes fires to grow so rapidly that the resulting heat and smoke pose a grave hazard to life. As early as 1972, the Department of Commerce issued a notice in the *Federal Register* that a regulation may be needed to eliminate or reduce the risk of injury and death from upholstered furniture fires.[9]

Furniture manufacturers, retailers, and component and material suppliers addressed smoldering ignition sources such as cigarettes in the late 1970s by adopting a voluntary standard through an industry organization formed for that purpose, the United Furniture Action Counsel (UFAC). The standard addressed only cigarettes as an ignition source—not open-flame sources. The industry adopted the standard largely to thwart mandatory federal regulation, which presumably would have been more stringent and thus more costly than the voluntary standard. The industry has continued to resist regulation for decades, primarily through the UFAC and the American Furniture Manufacturers Association (AFMA).

While the voluntary standard has reduced the incidence of upholstered furniture fires, both smoldering and open-flame ignition sources continue to cause catastrophic losses. The Consumer Product Safety Commission (CPSC) reported in 1997 and again in 2001 that upholstered furniture is associated with more residential fire deaths than any other product under its jurisdiction[10] and that the rate of injury and death from open-flame ignition of upholstered furniture had remained constant for more than 20 years.[11]

Until recently, neither the industry nor the CPSC had addressed the rate of fire growth after upholstered furniture ignites. A May 2005 CPSC draft performance-based flammability standard limits the mass or weight loss of burning furniture in a given period of time under a specific test protocol.[12]

Government agencies such as the National Institute of Standards and Technology, the U.S. Fire Administration, and the CPSC—as well as fire-related organizations such as the National Fire Protection Association (NFPA) and National Association of State Fire Marshals (NASFM)—have conducted testing and analyzed fire-loss trends and statistics and have published articles, studies, and reports chronicling the problem over

ROBERT P. FOSTER *is a partner in the Foster Law Firm in Greenville, South Carolina.* JOSEPH B. ZICHERMAN *is a fire scientist and a principal of Fire Cause Analysis, a consulting firm located in Berkeley, California.*

the last 30 years.[13] Numerous television documentaries have broadcast the tragic consequences of fires associated with these products and the unsuccessful efforts of these organizations to bring about positive change.[14]

In 1993, the NASFM petitioned the CPSC to pass regulations requiring that upholstered furniture be constructed with fire-retardant materials and that manufacturers convey appropriate warnings of fire hazards to consumers.[15] The CPSC has had the petition under consideration ever since. Regulatory forts may preempt that standard. In 1991, the state enacted stringent performance-based flammability regulations that incorporate heat-release sensing technology to ensure the safety of upholstered seating furniture used in public buildings.[20]

California has a stringent flammability regulation for mattresses as well. It includes scientific performance-based criteria to significantly reduce the deaths and injuries that polyurethene-filled mattresses have caused in the state for decades.[21]

Due to scientific advances, heat-release sensing technology could be used more widely to regulate the fire performance of commercial and residential upholstered furniture.

bills were introduced in the House and Senate in the 108th Congress, but they did not pass.[16]

The outcome of a 2003 CPSC meeting on furniture flammability[17] suggested that the furniture industry and its trade associations may be less resistant to improving their products' fire performance—possibly because it would help them control the growth of imported upholstered furniture. If standards were stricter, American manufacturers would have an edge over their foreign counterparts.

In 2004, leaders of the furniture, textile, and polyurethene foam industries, as well as the CPSC, NASFM, and public interest groups, participated in a hearing that then-Sen. Ernest Hollings (D-S.C.) convened on the proposed American Home Fire Safety Act. The industries acknowledged that a mandatory flammability standard was forthcoming and offered perspectives on available options to make their products safer.

California is the only state that regulates upholstered furniture for residential use,[18] and a bill is pending in its legislature to toughen its flammability standard.[19] However, any new federal legislation that results from the CPSC's ef-

The United Kingdom has adopted a stringent fire standard requiring the use of fire-retardant technology in residential furniture sold there since 1988.[22] A recent U.K. government study attests to the regulation's role in significantly reducing death, injury, and property damage caused by furniture fires.[23]

Due to scientific advances, heat-release sensing technology could be used more widely than in California to regulate the fire performance of commercial[24] and residential[25] upholstered furniture. However, even if manufacturers do make their furniture safer, the nation has a backlog of cushioned furniture and mattresses produced over the last 30 to 40 years that will continue to pose a grave hazard.

Types of claims

Furniture fire hazards are not a new phenomenon, although most Americans remain unaware of them. People injured by these fires are increasingly bringing recovery actions against manufacturers, material suppliers, and retailers of upholstered furniture products. To the authors' knowledge, no such claims have gone to trial, but many have been settled. In one Alabama case against a furniture maker, for example, a candle fell from a wall sconce to the floor and ignited a sectional sofa, killing two children and seriously injuring their mother. In another case, all four occupants of a Kentucky home died when a child set fire to a sectional sofa with a cigarette lighter.[26]

In addition to claims made for deaths and injuries from furniture fires, there is subrogation potential for insured property losses that furniture flammability defects exacerbated. As in automobile crashworthiness cases, you can argue that while the product itself did not cause the accident or the fire, its defective construction caused additional injury and damages.[27] In a furniture fire case, plaintiff counsel should try to prove that without the defect, no one would have been hurt or killed because the furniture may not have ignited—or, if it did, slower fire growth would have left ample time for a potential victim to understand the developing hazard and escape injury-free.

This theory also effectively rebuts the defense that the occupants' negligence somehow caused the fire. Furniture being exposed to a small ignition source is undeniably foreseeable, based on reliable government statistics.[28] In most states, manufacturers have a duty to design products without defects against foreseeable uses and misuses.[29]

A manufacturer has a duty first to eliminate defects and then, if the danger cannot be removed, to adequately warn users about the product's inherent dangers.[30] A retailer or distributor may not have "safe design" obligations but in most jurisdictions does have a duty to refrain from contributing to the defect (by removing warnings, for example) and to communicate any dangers of which it is, or should be, aware.[31] This duty can be used to address liability in states that have a "sealed container" defense, which insulates the distributors and retailers that pass the product along from the manufacturer.

In many instances, furniture manufacturers discard explicit flammability warnings from foam suppliers, and consumers never see them. The average consumer is unaware of the flammability characteristics of household fur-

niture, and those in the chain of distribution do little to advise them of these dangers.

Pursuing a case

When initially evaluating a potential case, you need to undertake a thorough investigation of the cause and origin of the fire and preserve the scene and remains of furniture that may have accelerated the blaze. You will need to show that the item in question was one of the initial materials ignited, so it does not appear that it was engulfed by a large conflagration that no product design could avoid. One could not reasonably expect a sofa to be fireproof.

It is important to determine what role the product played. You need to determine the area where the fire started, how the piece of furniture affected fire spread and fire suppression, and the product's background (when and where it was purchased and its manufacturer). Even if most materials have been burned away, the furniture springs almost always survive the fire and indicate the furniture's location.

The dense black smoke, toxic gases, and rapid heat release that accompany furniture and mattress fires rarely can be attributed to other household sources. Investigators should be aware that if these factors are present, defectively designed and manufactured cushioned furniture may well have been present. In the absence of known accelerants, investigators should focus on spread factors that led a small fire to grow quickly into a large one (consistent with NFPA 921, the NFPA's Guide for Fire and Explosion Investigations, which provides proper investigation techniques).

Documentation of the scene should include pre- and postfire conditions, dimensions of rooms and openings, remains of the furniture, and the condition of other furnishings.

It is important to preserve the scene of the fire and any furniture remains so that potential defendants can inspect them. This will help you avoid evidence-spoliation claims that could, under some state laws, lead to limitations on evidence presented at trial—or outright dismissal of the claim.[32]

As in any products case, you need to identify the manufacturer or other liable defendant. But in some cases, the piece of upholstered furniture at issue may have been so flammable that it virtually destroyed itself and rendered identification nearly impossible. The "law tag" that federal law requires be affixed to the product, identifying the maker and type and percentages of filling materials, seldom survives a substantial residential fire that originated with upholstered furniture.

Consumers often purchase furniture in suites, which may include a companion piece of furniture that was far enough away from the fire to have retained its identification tags. Another possible way to identify furniture is through retailers and rental companies, which may be able to provide a paper trail from the client back to the manufacturer.

Upholstered furniture has been estimated to last an average of 15 to 17 years[33] and is often passed down through family members and sold at yard sales and flea markets. This can make tracing the product through the chain of ownership back to a particular retailer or manufacturer difficult. Also, popular styles are copied by other makers, compounding the problem. Since styles of upholstered furniture change every six to nine months on average, the item in question is unlikely to be in production very long, which sometimes makes obtaining an exemplar for testing more difficult.

If an exemplar can be obtained, having an expert conduct full-scale testing of the product can help demonstrate its combustion characteristics. Burning characteristics such as rate of heat release; temperatures at various locations in the area of the furniture; smoke, carbon monoxide, oxides of cyanide and nitrogen generated; and consumption of oxygen can be measured and documented. Such testing often adds compelling evidence to the plaintiff's case. However, you should exercise caution in attempting to reconstruct the fire in question because many variables make precise reconstruction difficult, and

such attempts might not be admissible in court.

All states have statutes of limitations from the accrual of the claim, most often the date of the fire, unless minors or incompetents are living victims. Some states have statutes of repose from the date the product was manufactured or placed in the stream of commerce. Repose limitations can bar claims even before the fire occurred if the period of time between manufacture and the fire is longer than the period of repose. These statutes usually have been upheld against constitutional challenges based on equal protection, open courts, and due process.[3] You may want to consider whether the forum is subject to stringent statutes of limitations or repose when deciding where to file suit.

If the investigation and research look promising, you must weigh the merits of the claim and likelihood of success against the high costs of litigating a complex products case of this type. You may need to employ experts on several subjects, including ignitability, flammability, and design of upholstered furniture; warnings; cause and origin; toxicity of combustion by-products; human factors and behavior in fire emergencies; computer fire modeling; fire dynamics; and burn physicians, psychiatrists, and other medical experts. These cases always are litigated vigorously through extended periods of discovery.

A combination of full-scale tests, corporate depositions, and discovery can yield successful results against furniture makers. Full-scale tests of a defendant manufacturer's exemplar product that demonstrate a raging fire, as well as information in the public domain about the furniture flammability problem, provide fertile ground for discovery, depositions, mediation, and trial. You can use them to prove not only how dangerous upholstered furniture is but also that the defendants knew or should have known of these dangers and the means to mitigate them.

Until mandatory regulations or stricter standards make upholstered furniture safer, people remain vulnerable to the danger that their own furniture will fuel a fire. Technical knowl-

edge of upholstered furniture flammability, along with creative advocacy, will increase the likelihood of a favorable result for clients whose lives have been forever changed by this serious product defect. ■

Notes

1. JOHN RAYMOND HALL, CHILDREN PLAYING WITH FIRE: U.S. EXPERIENCE, 1980-1992 (1994); JOHN RAYMOND HALL, CHILDREN PLAYING WITH FIRE (2003).

2. Flashover is the point in the growth of a fire in a room or compartment where the hot gas layer developing at the ceiling level radiates sufficient heat energy to essentially ignite all combustibles in the room simultaneously. The "whoosh" that witnesses of serious fires describe refers to flashover.

3. Alison Miller, *What's Burning in Home Fires?*, NFPA J., Sept./Oct. 1991, at 73.

4. Typical warnings and material safety data sheets from polyurethane foam suppliers notify of rapid flame spread, intense heat, dense black smoke, and toxic gases (carbon monoxide and hydrogen cyanide); warn that the material can cause serious injury or death, consumes oxygen at high rate (can suffocate), and melts into a burning liquid; and advises furniture makers to avoid open flames and ignition sources near the material and to pass notification on to the consumer.

5. CONSUMER PROD. SAFETY COMM'N, BRIEFING PACKAGE ON UPHOLSTERED FURNITURE FLAMMABILITY: REGULATORY OPTIONS 6, 10 (2001), *available at* www.cpsc.gov/library/foia/foia02/brief/furnitrep1.pdf (last visited Oct. 5, 2005) [hereinafter CPSC BRIEFING PACKAGE 2001].

6. GEORGE BOOTH, SPRINGS INDUS. PRODS. DIV., USING OPEN FLAME BARRIERS TO ACHIEVE STATE OF THE ART PERFORMANCE (1996) (on file with author).

7. For example, Hickory Spring Code Red Fire Retardant Foam has been available since the early 1980s.

8. Joseph B. Zicherman & Douglas Allard, *Compartment Tests of Polyurethane Foam Seating Assemblies*, 24 FIRE TECH. 128 (1988).

9. 37 Fed. Reg. 230 (1972).

10. CONSUMER PROD. SAFETY COMM'N, BRIEFING PACKAGE ON UPHOLSTERED FURNITURE FLAMMABILITY: REGULATORY OPTIONS FOR SMALL OPEN FLAME AND SMOKING MATERIAL IGNITED FIRES 5 (1997), *available at* www.cpsc.gov/library/foia/foia98/brief/3458ca2d.pdf (last visited Oct. 5, 2005) [hereinafter CPSC BRIEFING PACKAGE 1997]; CPSC BRIEFING PACKAGE 2001, *supra* note 5.

11. CPSC BRIEFING PACKAGE 2001, *supra* note 5, at 12.

12. CPSC STAFF DRAFT STANDARD FOR UPHOLSTERED FURNITURE FLAMMABILITY (May 12, 2005), *available at* www.cpsc.gov/library/foia/foia05/brief/uphols1.pdf (last visited Oct. 5, 2005).

13. Miller, *supra* note 3; CPSC BRIEFING PACKAGE 2001, *supra* note 5, at 5-6; CONSUMER PROD. SAFETY COMM'N, CIGARETTE IGNITION OF UPHOLSTERED FURNITURE: COMMISSION OPTIONS (2003), *available at* www.cpsc.gov/library/foia/foia04/pubcom/cigarettept1.pdf (last visited Oct. 5, 2005).

14. *See, e.g.*, *Dateline NBC* (NBC television broadcast, Oct. 4, 1998); *Early Show* (CBS television broadcast, Feb. 16, 2004).

15. 16 C.F.R. §1640 (1994).

16. Foam Fire Safety Act, H.R. 3437, 108th Cong., 1st Sess. (2003); American Home Fire Safety Act, H.R. 4233, 108th Cong., 2d Sess. (2004); American Home Fire Safety Act, S. 1798, 108th Cong., 1st Sess. (2003). The Fire Foam Safety Act, H.R. 943, 109th Cong., 1st Sess. (2005), was introduced this year to direct the CPSC to issue standards addressing open-flame ignition of consumer products containing polyurethane foam.

17. At a public meeting on Upholstered Furniture Flammability Rulemaking held on September 24, 2003, the AFMA and other upholstered furniture and related industry groups recommended that the commission promulgate mandatory rules addressing both cigarette and open-flame ignition of upholstered furniture. Press Release, Consumer Prod. Safety Comm'n, CPSC Votes to Expand Rulemaking for Upholstered Furniture Flammability (Oct. 21, 2003), *available at* www.cpsc.gov/cpscpub/prerel/prhtml04/04012.html (last visited Oct. 5, 2005).

18. Bureau of Home Furnishings & Thermal Insulation (BHFTI), Cal. TB-117 (2000), *available at* www.bhfti.ca.gov/techbulletin/117.pdf (last visited Oct. 5, 2005).

19. Cal. TB-117, Draft Amendment, Flammability of Upholstered and Reupholstered Furniture (2002) (on file with author).

20. Cal. TB-133 (effective Mar. 1992), *available at* www.bhfti.ca.gov/techbulletin/tb133.pdf (last visited Oct. 5, 2005).

21. Dep't of Consumer Affairs, BHFTI, Flammability Regs., Art. 13 (rev. 2005) (implementing CAL. BUS. & PROF. CODE §§19000-19221). Section 1371 requires that mattresses meet the requirements of TB-603 (2004).

22. The Furniture and Furnishings (Fire) (Safety) Regs. 1988 (commonly referred to as BS 5852), *available at* www.dti.gov.uk/ccp/topics1/guide/furnitureguide.pdf (last visited Oct. 5, 2005). A description of these regulations is available at www.pfa.org/intouch/new_pdf/hr_IntouchV7.pdf (last visited Oct. 5, 2005).

23. CPSC BRIEFING PACKAGE 1997, *supra* note 10, at 35, *citing* Univ. of Surrey, Effectiveness of the Furniture & Furnishings (Fire) (Safety) Regs. 1988 (2000).

24. WILLIAM J. PARKER ET AL., NAT'L INST. OF STANDARDS & TECH., FURNITURE FLAMMABILITY: AN INVESTIGATION OF THE CALIFORNIA TECHNICAL BULLETIN 133 TEST, PART III: FULL SCALE CHAIR BURNS, NISTIR 4375 (1990).

25. Vytenis Babrauskas, *The Results of a Major Upholstered Furniture Fire Study*, NFPA J., July/Aug. 1996, at 84; Vytenis Babrauskas, *Upholstered Furniture Heat Release Rates: Measurements and Estimation*, 1 J. FIRE SCIENCES 9 (1983).

You need to identify the liable defendent. But in some cases, the piece of upholstered furniture was so flammable that it destroyed itself and rendered identification nearly impossible.

26. For more information on settled or pending cases, visit www.fosterfoster.com/CM/RecentCasesandDecisions/UpholsteredFurnitureFlammabilityCases.asp (last visited Oct. 5, 2005).

27. *See, e.g.*, Connelly v. Hyundai Motor Co., 351 F.3d 535 (1st Cir. 2003); Jimenez v. Daimler-Chrysler Corp., 269 F.3d 439 (4th Cir. 2001).

28. Miller, *supra* note 3; CPSC BRIEFING PACKAGE 2001, *supra* note 5, at 5-6; CONSUMER PROD. SAFETY COMM'N, *supra* note 13.

29. *See, e.g.*, Halter v. Waco Scaffolding & Equip. Co., 797 P.2d 790 (Colo. Ct. App. 1990); Tide Craft, Inc. v. Red Ball Oxygen Co., 514 So.2d 664 (La. Ct. App. 1987); Towner v. Grand Trunk W. R.R. Co., 57 Fed. Appx. 232 (6th Cir. 2003).

30. *Halter*, 797 P.2d 790; *Towner*, 57 Fed. Appx. 232.

31. *See, e.g.*, KY. REV. STAT. ANN. §411.340 (Baldwin 2005); N.C. GEN. STAT. §99B-2(a) (2005).

32. *See, e.g.*, McLain v. Taco Bell Corp., 527 S.E.2d 712 (N.C. Ct. App. 2000); Beers v. Bayliner Marine Corp., 675 A.2d 829 (Conn. 1996); Kambylis v. Ford Motor Co., 788 N.E.2d 1 (Ill. Ct. App. 2003). (*McLain* and *Beers* apply adverse inference for spoliation of evidence; *Kambylis* speaks of disbarment of evidence as appropriate sanction.)

33. CPSC BRIEFING PACKAGE 2001, *supra* note 5, at 50.

34. *See, e.g.*, Davidson v. Volkswagenwerk A.G., 336 S.E.2d 714 (N.C. Ct. App. 1985); Love v. Whirlpool Corp., 449 S.E.2d 602 (Ga. 1994) (statute that bars strict liability actions after 10 years from date of first sale does not violate equal protection).

Fire
Cause
Analysis
A DIVISION OF IFT INC.

October 9, 2001

Ms. Ann Brown
Chairperson – US Consumer Product Safety Commission
4330 East West HWY
Bethesda, MD 20814-4408

RE: Furniture Flammability

Dear Ms. Brown:

I have been impressed with the renewed efforts of the CPSC to upgrade the fire safety of US citizens over recent years and have in particular been interested in the Commission's activities related to furniture flammability.

For many years we have known that certain types of padded, upholstered furniture present unreasonable dangers in that they ignite readily and immediately after ignition producing copious quantities of heat, smoke and other unwanted products of combustions.

For your information I have enclosed two videotapes that illustrate how differently padded couches burn when subjected to small ignition sources.

For some years I have worked in the area of fire safety and I am convinced that the poor fire performance and rapid heat and smoke release shown by most of the cushioned furniture available to consumers in the U.S. has contributed to many deaths and injuries. Most of the cases I have been involved with included ignition of a piece of cushioned furniture by a small flame, which led to rapid fire growth and the death of building occupants.

In the first video you will see three different fire tests I conducted to assess the fire performance of couches involved in fatal fire incidents. The first is the test of a defective couch design built over 20 years ago and the results are quite spectacular. Imagine this happening in your home! The second test segment is a similar fire test of a couch sold quite recently to a family in South Carolina. Both performed similarly when lit with a single match and both were directly responsible for the deaths of people exposed when they burned. The test results also illustrate and emphasize the fact that little improvement has taken place in such furniture over the past 20 years.

The third and last fire test segment is of a futon purchased recently in the Phoenix area which is composed of a cost-effective but highly fire safe combination of foam and cotton batting. All one has to do is contrast the performance of the former two to the latter couch and it is easy to see that safe, cost effective furniture can be produced for sale if manufacturers care to take the necessary steps.

The second tape is of a television news show segment dealing with a case in South Carolina, which we worked on for an attorney in Greenville some years ago. It may prove instructive and is self-explanatory.

Offices in Sacramento, Point Richmond and Southern California

213 WEST CUTTING BOULEVARD
POINT RICHMOND, CALIFORNIA 94804-2015 USA
510.231.7885
800.726.5939
FAX 510.231.7899

I discussed this matter with Jim Hoebbel some years ago as the CPSC ignition test work began and suggested a parallel path utilizing heat release of completed furniture as an alternate to ignition of coverings. This was not suggested as a replacement for ignition testing but rather as another method to provide safe furniture for US citizens that was not affected by the vagaries of ignition testing.

This is an issue which I know is controversial, but technically, measurement of furniture heat release is done reliably every day using both ASTM and ISO standard methods and it is one that could be readily used for regulatory purposes. In certain states and for certain occupancies the concept is being used already.

In terms of cost benefits, I have tested well-designed furniture for heat release properties and have been pleasantly surprised of late. An example is the futon we tested to assess its role in a fatal fire involving children playing with matches. This is the third test on the first video. While the fire that killed the children in question was a fast fire, it was clearly not caused by the futon in question. In this case, the slow, manageable fire, which occurred, would have been of little risk to building occupants in terms of heat release and safe exiting in particular.

Conversely – and sadly, I have been involved in three cases of late in the southeastern US where this was not the case. In those cases, children playing with matches ignited couches bought in local furniture outlets and caused fires which killed one or more people in each case. These tragic accidents could be avoided by using routinely available materials and construction techniques if the furniture industry cared to do so.

I have also discussed this matter with Dr. Kurt Reineman chairman of the ASTM E-5 subcommittee dealing with flammability characterization of room furniture of BASF, a foam manufacturer and he and his group are interested in working with CPSC on this issue.

If I can be of assistance, I will be happy to speak to you and your staff. I strongly urge that the CPSC adopt regulations utilizing heat release as a regulatory criterion as an alternate to measuring the ignitability of upholstery.

Thank you.

Joseph B. Zicherman Ph.D., SFPE

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, DC 20207

January 15, 2002

Dr. Joseph Zicherman
Fire Cause Analysis Services
213 West Cutting Blvd.
Point Richmond, CA 94804-2015

Dear Dr. Zicherman:

Thank you for your recent letter and accompanying videotapes regarding upholstered furniture flammability. Please excuse the delay in responding to you. As you know, the U.S. Consumer Product Safety Commission (CPSC) has been investigating the need for a possible flammability standard to reduce the risk of fire to the public. The Commission initiated a regulatory proceeding in 1994 by publishing an advance notice of proposed rulemaking (ANPR) in the *Federal Register*; this proceeding focuses on the risk of fires involving ignitions of upholstered furniture by small open flame sources such as lighters, matches and candles.

The CPSC staff developed a draft small open flame standard that evaluates small open flame performance based primarily on mockup tests of upholstered seating assemblies. The staff considered but did not incorporate provisions limiting heat release in the draft standard, due chiefly to the complexity of heat release testing. CPSC's laboratory testing indicates that various flame-retardant (FR) materials, such as FR cover fabrics or fire-blocking barriers, can substantially reduce the risk by preventing ignition or by causing ignited products to self-extinguish in the early stages of fire growth, before heat release becomes a significant factor. In October 2001, the staff forwarded a briefing package of information on upholstered furniture to the Commission. The package is publicly available on-line at CPSC's web site: http://www.cpsc.gov/library/foia/foia02/brief/briefing.html (the first two pdf files contain a summary; the rest are technical appendices).

As you noted in your letter, an ASTM subcommittee has established a work group to develop a possible test method and voluntary standard to address the small open flame risk associated with upholstered furniture. The work group, chaired by Dr. Kurt Reimann of BASF Corporation, has also considered the heat release approach; the group is now studying tests that measure mass loss rates, and are looking at the relationship between mass loss and heat release in composite mockup tests. The CPSC staff is continuing to work closely with this group and others to develop possible alternatives to a federal standard.

The CPSC staff will consider all reasonable technical approaches as we continue to work toward reducing the risk to consumers associated with upholstered furniture fires. Please feel free to call me any time at 301-504-0962 ext. 1323 (or e-mail: dray@cpsc.gov) if you have any further questions on the progress of this work.

Sincerely,

Dale R. Ray
Project Manager,
Upholstered Furniture Flammability

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Stevenson, Todd

From: Vince Diaz [vdiaz@atlanticthread.com]
Sent: Thursday, May 15, 2008 12:08 PM
To: CPSC-OS
Subject: "Upholstered Furniture NPR"
Attachments: Public Comment to 16CFR1634.doc

The attached comments are relevant to 16 CFR Part 1634, Standard for the Flammability of Residential Upholstered Furniture, Notice of Proposed Rulemaking, Vol.73 No. 43.

Submitter: Vincent Diaz (vince@atlanticthread.com)

Public Comment to 16CFR1634

A. Introduction

The following items are offered as evidence of the bona fides and qualifications of the reviewer:

1. Since 1980, the reviewer has been President of company that is a specialty supplier of FR threads and other FR components used in the manufacture of FR clothing, aircraft seating, school bus seating, business furniture, and mattresses (compliant to 16CFR1633)

2. Member of National Fire Protection Association (NFPA) committees responsible for writing the following NFPA Protective Clothing Standards for various types of firefighting:

    a. NFPA 1971 Structural Fire Fighting
    b. NFPA 1977 Wildland Fire Fighting
    c. NFPA 1975 Station Work Uniforms

3. Contributor to the development of Commercial Item Descriptions (CID's) used by Federal Government to identify FR sewing threads:

    a. A-A-50195 Thread, Aramid (Filament Nomex®)
    b. A-A-55217 Aramid, Spun, Staple (Spun Nomex®), Type I and Type II
    c. A-A-55220 Para-Aramid (Filament Kevlar®) Intermediate Modulus
    d. A-A-55195 Para-Aramid (Spun Kevlar®) Intermediate Modulus, Type I and Type II

4. Member of ASTM Committee D13 on Textiles, Committee F23 on Protective Clothing, and Committee F18 on Electrical Hazards. Task group leader or member that developed two ASTM standards that are relevant to this proposed ruling:

    a. D7016 – Standard Test Method to Evaluate Edge Binding Components used in Mattresses After Exposure to an Open Flame
    b. D7140 – Standard Test Method to Measure Heat Transfer Through Textile Thermal Barriers

5. Author of article in ***Standardization News***, Sept, 2005, ***Safe and Peaceful Sleep***

B. General Comments

1. In the opinion of the reviewer, the term ***flame resistant*** represents a synergy between a consumer having time to escape, if the upholstered furniture should catch fire, and the safety of the fire fighters who could confront the house fire where the furniture is located. Any residential fire which includes upholstered furniture as part of the fuel load could result in a flashover.

   The reviewer does not agree in having two distinct challenges used to determine flame resistance. The concept of two challenges – smoldering versus open flame – seems to be an open door for "deniability" subsequent to a tragedy. The recent furniture warehouse fire in South Carolina (that resulted in the death of nine firefighters) comes to mind. My experience makes me believe that if an open flame requirement had been in place at the time of that fire, the potential for reducing the loss of life would have been much greater.

2. The purchase of furniture, like the purchase of major appliances, is a transaction that is only made a few times in a consumer's lifetime. Most consumers don't remember how much they spent for their last washing machine, clothes dryer, or sofa.

   Because upholstered furniture like these other major purchases, is such an "emotional" purchase, consumers are always searching for more "value". For most consumers this "value" translates into three concepts: (1) Help me understand why I should make this purchase in your store, (2) Give me monthly payments that are affordable, and (3) Tell me that this furniture will have "service life" (performance) after all the payments are made.

   As consumers become more affluent the search for value becomes even more important.

   If the proposed ruling is changed to a single performance requirement—open flame—it would add a dimension of "safety" for every socio-economic group in society. It also creates the opportunity to help the consumer purchase a "fashionable" product that offers both function (performance) and safety.

C. Specific Issues Related to 16CFR1634

The following issues, in the opinion of the reviewer, require analysis before advancing 16CFR1634 to a Final Ruling.

1. Smoldering versus Open Flame

While the percentage of the Americans who smoke continues to fall, the growing number of candles, fire places, space heaters and electrical cords add to the potential for "sparks" and "flames" that can ignite an upholstered textile structure. If television commercials and print advertising are accurate, the potential of a flying spark from a fireplace, or upsetting a candle on a table seem to be greater than a smoldering cigarette.

Open flame poses an immediate threat to the textile structure because the dress fabric (ticking or cover fabric) is immediately challenged to retain its integrity while preventing flame and heat from reaching the combustible foam on the interior.

The dual level proposal of this standard for upholstered furniture is similar to how the Commission currently obligates compliance by mattress manufacturers to meet both 16CFR1632 and 16CFR1633. In the reviewer's opinion, the current 16CFR1632 requirement should be eliminated and leave a single more aggressive requirement, the open flame parameters of 16CFR1633.

I would question data that shows a "smoldering" cigarette" posing a greater threat or danger than an "open flame". I am confident that empirical data would show how mattresses that are compliant to the performance requirements of 16CFR1633 would easily pass 16CFR1632.

It would seem that the Commission would be better able to enforce "performance" and adherence to it regulations if it removed the dichotomy of smoldering and open flame being proposed in 16CFR1634, the same duality that currently exists for mattresses (16CFR1632/16CFR1633).

Creating this duality in the proposed 16CFR1634 document poses, I believe, an enforcement nightmare for the Commission and a great deal of confusion for the consumer.

2. Flammability of Interior

Upholstered furniture, much like mattresses, have interior components which are volatile and can quickly reach 500kW of energy. The use of a thermal barrier between the dress cover and the volatile interior foam acts to reduce the heat transfer, increase the time to ignition, and ultimately increase the time for escape.

Currently, there are a range of thermally stable barriers that have proven performance in other markets such as aircraft seating, business furniture, and school bus seating. The supply chain is also ready to meet the demand of manufacturers for additional performance solutions.

3. Traceability

Reviewer believes that a product model traceability program, similar to the program mandated in 16CFR1633 (Qualified prototype/Confirmed prototype/Subordinate prototype) should be included. While it could be argued that a furniture manufacturer might be impacted because the sales volume of a specific model could be low, it is incumbent that the manufacturer has done due diligence.

The manufacturer would be required to demonstrate how a generic upholstered sofa made with specific FR components listed in the bill of materials, will deliver a level of performance that provides the consumer with time to escape after exposure to an open flame. This traceability should also be made part of the label requirements by stating the performance level as either time to cessation of burning, or a measured heat level after a specific period of time (e.g. 30 minutes).

These full scale product test data can be maintained by the manufacturer along with ongoing data about critical FR components listed on the bill of materials. The FR component suppliers should be required to issue Certificates of Analysis (C of A) to confirm consistency of performance or use a third party auditor to evaluate consistency of product.

4. Component and Subassembly Testing

Reviewer proposes that the Commission consider using the following ASTM standards to evaluate components:

1. Sewing Thread
   b. Using ASTM D7016, Section 6, test sewing thread for resistance to melting and retained strength after exposure to hot air.

c. Using ASTM D7016, Section 8, test sewn seams (without edge tape) to an open flame and then evaluate for retained seam break strength.

2. Thermal Barrier
Using ASTM D7140, test thermal barriers to determine rate of heat transfer.

Summary
The reviewer believes that 16CFR1634, as currently written, creates enforcement challenges for the Commission and confusion for consumers. Reviewer recommends the NPR be changed to require meeting a single hazard—open flame resistance.

A single hazard—open flame—establishes a measurement that is supported by pass/fail data that is not ambiguous in its interpretation by the Commission, the retailer, and the consumer.

The Commission, if a decision is made to only require an open flame challenge, should also consider component and subassembly testing using ASTM standards D7016 and D7140.

Respectfully,

Vincent Diaz
President
Atlantic Thread & Supply Co., Inc.

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Stevenson, Todd

From: xmen72@optonline.net
Sent: Thursday, May 15, 2008 12:13 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR

May 15, 2008

Mary Ellen Tang
18 Equestrian Ct.
Huntington, NY 11743
(631) 367-9304

To Whom It May Concern:

I am writing to bring your attention to the Consumer Product Safety Commission's Upholstered Furniture Flammability Recommendations and the danger it poses to both our citizens and firefighters. I have heard and read about endless fires that have started with upholstered furniture and resulted in so much damage, injuries and fatalities. Based on these stories and statistics, we absolutely need a solution that would prevent or lessen the chances of injuries and fatalities, specifically one where furniture would burn more slowly in the event of a fire, thereby increasing our chances to take protective measures.

The 16 CFR 1634, from the Notice of Proposed Rulemaking (Federal Register / Vol. 73, No. 43 / Tuesday, March 4, 2008 / Proposed Rules) does not address this need and this is very concerning to me. Although testing with cigarettes is useful, it is in no way comprehensive, as fires are often started by other objects, such as candles.

Therefore I am pleading with you to develop rules and recommendations that would give us, as citizens, and first responders, such as our firefighters, a real chance to save lives and provide some protections from the horrible destruction a fire can cause.

Thank you.

Sincerely,

Mary Ellen Tang

May 15, 2008

Office of the Secretary

Consumer Product Safety Commission

4330 East West Highway

Bethesda, MD 20814

Dear Chairwomen Nord:

Fire safety is of utmost importance to mc. As a firefighter and safety expert, I have dedicated my time to helping educate the citizens of my area about the dangers of residential fires and the steps they can take to help prevent them. When a residential fire does occur, I am there to protect our citizens while attempting to minimize the physical and emotional damage that fires produce.

One of the biggest factors in residential fire safety is the standard for fire retardants on the products within the home. Fire retardants add crucial time for residents to leave a house during a fire, as well as minimize the potential reach of the flames. The CPSC holds the power to set these fire safety standards for residential products, and I am disappointed in the direction of the latest CPSC flammability standards proposals.

I would expect the CPSC to partner with fire personnel to provide the highest standards of fire protection available. As a member of the Citizens for Fire Safety coalition I am writing to request that you revisit your current proposal on flame retardant standards in residential furniture.

In 1991, the National Association of State Fire Marshals petitioned the Consumer Product Safety Commission to develop a standard to deal with flammability issues related to residential upholstered furniture. This was in response to the high incidence of deaths due to fires caused by small open flames and smoldering cigarettes. Since that time, the Commission has made several proposals dealing with one element or another of the problem but has failed to come up with a comprehensive standard that has the support of the furniture industry while allowing for the highest levels of fire safety.

The Commission's most recent proposal deals only with the covering fabric and does not require the foam — which is the most flammable — to be treated for flame retardancy. The proposal fails to acknowledge that the furniture would only be as flame protected as the integrity of the barrier. If the barrier is not put together well (leaving gaps around the foam) or it is punctured by pets, children or other causes, the furniture is no longer flame retarded.

The lives of firefighters and the citizens we strive to protect are at stake. The current flammability standards play a significant role in residential fire safety and should be revisited by the CPSC.

Sincerely,

Fred Hickey

Newport Fire Department

cc: cpsc-os@cpsc. gov

Stevenson, Todd

From: amanda@newportmaine.net
Sent: Thursday, May 15, 2008 1:34 PM
To: CPSC-OS
Subject: Fire Safety
Attachments: Fire Letter.doc

Newport Fire Department
21 Water Street
Newport, Maine 04953
(207)368-4410

SILENT SPRING INSTITUTE

RESEARCHING THE ENVIRONMENT AND WOMEN'S HEALTH

29 Crafts Street, Newton MA 02458 617 332 4288 fax 617 332 4284
email info@silentspring.org www.silentspring.org

May 15, 2007
Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway, Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

We applaud the excellent work of the Consumer Product Safety Commission in developing the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) without a small open flame standard for foam, but are concerned that the smoldering ignition standard may still require the use of potentially toxic fire retardant chemicals.

As we develop new policy, we must examine the unintended consequences of existing regulations, such as California's open flame standard for foam (TB 117). Historically, compliance with TB117 has been met with use of toxic chemicals such as pentabromodiphenyl ether (pentaBDE) or chemicals lacking adequate health information such as Firemaster 550. As a result, 95% percent of the global pentaBDE demand was used primarily on furniture foam to meet California's unique fire safety standard.

Many of these chemicals migrate out of furniture and end up in house dust. New research by Silent Spring Institute shows that pentaBDE dust levels in California are 4 to 10 times higher than other U.S. states and 200 times higher than Europe (see attached graph). This is critical to human health because humans can be exposed to these dangerous chemicals through dust. Young children are especially vulnerable due to their frequent hand-to-mouth behavior and close contact with the floor. In animal studies, a number of these chemicals cause thyroid abnormalities, endocrine disruption, cancer and learning disabilities.

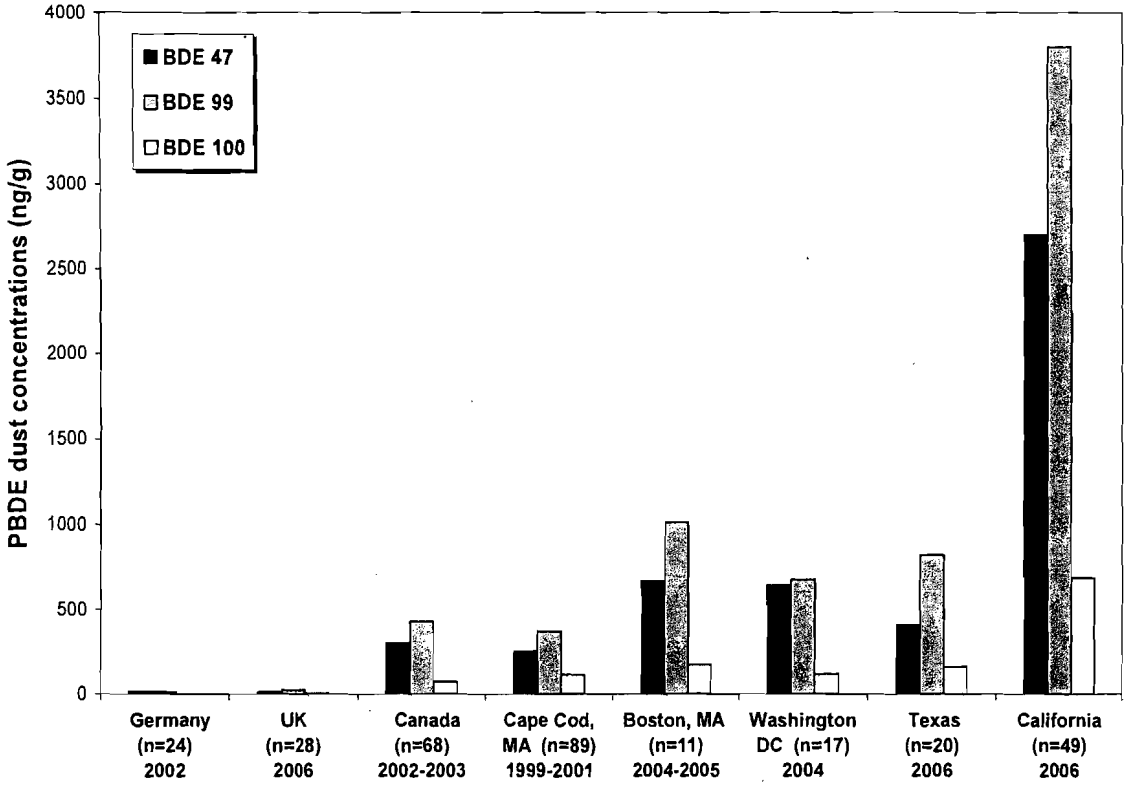
CPSC should require that any flame retardant chemicals to be used in any consumer product are fully tested by the manufacturer for potential human health and environmental effects BEFORE they are used in any manner that could result in human exposure. Further, labeling of the product for flame retardants should be required to provide information about specific chemical constituents to consumers.

We appreciate the Commission's support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of increasing human and environmental exposure to potentially toxic fire retardant chemicals for which there is inadequate health and safety information.

Thank you.
Sincerely,

Ami Zota, Sc.D., Silent Spring Institute
Julie Brody, Ph.D., Silent Spring Institute
Ruthann Rudel, M.S., Silent Spring Institute
Robin Dodson, Sc.D., Silent Spring Institute
Laurel Standley, Ph.D., Silent Spring Institute
Kathleen Attfield, B.A., Silent Spring Institute
Sarah Dunagan, M.A., Silent Spring Institute

Higher dust levels of PBDEs in California



Source: Zota A.R., Rudel R.A., Morello-Frosch R.A., Camann D.E., Brody J.G. 2007. Regional variation in levels of indoor polybrominated diphenyl ethers may reflect differences in fire safety regulations for consumer products. 17th Annual Conference of the International Society of Exposure Analysis. Research Triangle Park, NC.

Stevenson, Todd

From: Sarah Dunagan [dunagan@silentspring.org]
Sent: Friday, May 16, 2008 12:13 PM
To: CPSC-OS
Cc: Ami Zota
Subject: Upholstered Furniture NPR
Attachments: CPSC comments_SSI_05.16.08.pdf

Dear Commission,

Please find our letter regarding the Upholstered Furniture NPR attached.

Thank you,

Sarah Dunagan

--
Sarah Dunagan
Silent Spring Institute
29 Crafts Street
Newton, MA 02458
617-332-4288 x228

April 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Dear Chairwomen Nord:

As a small business owner and recently employed in the Health arena, I am writing today to state my thoughts on the CPSC, in it's November, 2007, response to fire safety standards on residential furniture. It is my understanding that the Commission stated that chemical flame retardants are not required to be used to meet a standard!

It is well known that Chemical flame retardants are used to protect the foam as well as the covering fabric from both small open flames and smoldering ignition. These retardants allow the public, crucial time to leave their residence.

I ask that the CPSC please reconsider their decision and the stakeholder agreement from 2004, designed to protect the fabric and the foam in furniture, resulting in a standard that will provide the maximum protection to the public.

Sincerely,

Chris Hall

Chris Hall
P.O. Box 90234
Anchorage, Alaska 99509

Stevenson, Todd

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From: Tony Stefani [sffcpf@sbcglobal.net]
Sent: Thursday, May 15, 2008 6:24 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR

May 15, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To the Commission:

The San Francisco Firefighters Cancer Prevention Foundation would like to register our support for the new CPSC Proposed Rule entitled "Standard for the Flammability of Residential Upholstered Furniture."
The San Francisco Fire Department is suffering from an epidemic of cancer-related deaths. We feel that one of the main reasons firefighters are contracting cancer at alarming rates is because of the exposure to toxic halogenated fire retardant chemicals that are currently applied to much of the nation's furniture foam. We conducted a survey of retired firefighters. Out of the 721 who responded to the survey, 246 either have cancer or have had cancer and are recovering.
These numbers are unacceptable.

The American Journal of Industrial Medicine in a recent report has shown that firefighters are at great risk for brain cancer and colon cancer compared to men in other occupations. It was also stated that firefighters were at higher risk for bladder cancer, kidney cancer and Hodgkins lymphoma. When halogenated fire retardants burn, they off-gas dioxins and furans which can be inhaled and absorbed through the skin.

There was also a study that was published last November in the Journal of Occupational and Environmental Medicine which found that firefighters have significantly elevated rates for four types of cancer: prostate, testicular, multiple myeloma and non-Hodgkins lymphoma. The authors of this study also stated that firefighters' risk for the four most common cancers could be related to their exposure to complex mixtures such as the toxic products created when halogenated fire retardants burn, namely furans and dioxins.

The San Francisco Firefighters Cancer Prevention Foundation strongly supports CPSC's Proposed Rule entitled "Standard for the Flammability of Residential Upholstered Furniture."

Sincerely,

Tony Stefani
Chairman of the Board
San Francisco Firefighters Cancer Prevention Foundation

STATE OF CALIFORNIA
dca
DEPARTMENT OF CONSUMER AFFAIRS

STATE AND CONSUMER SERVICES AGENCY • ARNOLD SCHWARZENEGGER, GOVERNOR
Bureau of Home Furnishings and Thermal Insulation
3485 Orange Grove Ave, Suite A, N. Highlands, CA 95660
P 916-574-2041 F 916-574-0376 | www.bhfti.ca.gov

May 16, 2008

Office of the Secretary,
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

RE: Comments on the CPSC's Proposed Furniture Flammability Standard 16 CFR 1634

Introduction

On March 4, 2008 the Consumer Products Safety Commission (CPSC) published a notice of proposed rulemaking (NPR) on upholstered furniture in the Federal Register. CPSC is currently soliciting public comments on the proposed standard through May 19, 2008. In this document a national residential furniture flammability standard entitled: "16 CFR part 1634 Standard for the Flammability of Residential Upholstered Furniture" has been proposed. The link on the CPSC's web menu is: http://www.cpsc.gov/businfo/frnotices/fr08/cpscfr08.html. The full history of CPSC's activities in regards to developing a national furniture flammability standard is described on page 11702 (page one) of the above referenced document under "Background".

Petitioned by the National Association of State Fire Marshals (NASFM) in 1993, CPSC began looking into flammability of upholstered furniture. CPSC started this work by looking into the existing furniture standards including California Technical Bulletin 117, United Kingdom's BS 5852, UFAC's smoldering standards, the 2002 revision of TB 117, and others. In the following 15 years, CPSC's proposed furniture standard was subject to many changes and modifications. The early versions of its standard included both open flame tests as well as cigarette smoldering tests. Later, the smoldering test was dropped and only open flame tests were retained. Finally, the latest proposed standard (dated March 2008) contains primarily a cigarette smoldering test and has no provisions for an open flame test of the furniture or its components. For fabrics that fail the smoldering test, a barrier test is considered in the standard that includes both a smoldering test and an open flame test. The proposed standard is apparently approved by the two existing CPSC's commissioners. CPSC has only two commissioners at this time since the third spot is currently vacant.

As we have indicated in our comments, the Bureau strongly believes that the CPSC's latest proposed test method is a significant step backwards and will seriously compromise the safety of the California consumers in regards to open flame fire hazard of upholstered furniture.

Comments

Since October 1975, the California Bureau of Home Furnishings and Thermal Insulation (the Bureau) has enforced a furniture flammability standard known as California Technical Bulletin 117 (TB 117) that addresses small open flame ignition and smoldering sources. Available fire statistics have shown that, despite its weaknesses, this minimum California upholstered furniture flammability standard has provided improvements in fire resistance for upholstered furniture components compliant with the standard. On average, upholstered furniture fire deaths and injuries in California have been well below national levels.

The Bureau strongly believes that any national furniture flammability standard must address the typical scenario of open flame ignition in upholstered furniture. Preventing hazards to life, health and property that these products represent when ignited is of extreme concern. Although the national fire statistics show that the majority of the upholstered furniture fires are caused by carelessly discarded smoldering cigarettes, the open flame ignition of upholstered furniture has also consistently posed a serious fire hazard.

Here are some of the most important reasons that an open flame standard for residential upholstered furniture is necessary:

National fire statistics show that many open flame residential fires often result in injuries and fatalities in children. According to U.S. Fire Administration/National Fire Data dated April 2005 [1], an estimated 2,490 children age of 14 or younger were injured or killed in residential fires in 2002. Fifty-six percent of child fire casualty deaths were under the age of 5. According to these data arson (30%), open flame (28%) and heating (17%) were the leading causes of fires resulting in child fire deaths in 2002. Upholstered furniture, cooking materials, bedding, and mattresses were the primary materials first ignited in fires that resulted in child casualties. Bedding and upholstered furniture were the materials first ignited in 38% of fatal child fires. Lighters and candles were the primary heat sources for these fires.

A November 2001 report by the U.S. Fire Administration on multiple-fatality fires [2] shows that these fires originate mainly in the lounge area, such as living rooms and family rooms. From 1996 to 1998, fires originating in the lounge areas accounted for 33% of multiple-fatality fires; 22% originate in bedrooms and 15% originate in the kitchen [3]. According to the same report the leading form of material ignited in multiple-fatality fires is upholstered sofa and chairs and the leading form of heat of ignition for such fires is open flame which includes candles, matches and lighters. In fact, the latest data from U.S. Fire Administration [3] indicate the rise in candle fires in residential dwellings. According to these data, the explosive growth of the candle sales in recent years parallels the annual increase in candle fires. The incidences of fires directly attributable to candles in residential structures have increased since 1993. The leading materials first ignited by candles are cabinetry, mattresses, curtains and upholstered furniture.

Regardless of what item ignites first, consideration of the size of the fuel load in residences is of utmost importance and must not be neglected. Modern day residences contain large volumes of upholstered furniture and bedding that overall constitutes a substantial amount of ready-to-burn fuel load that can significantly contribute to any developing fire. It is, therefore, extremely critical to address the potential fire hazard of upholstered furniture and its contribution to the heat released by the combustibles, namely, the cover and the inside filling components. Not only is upholstered furniture among the most readily ignitable and combustible items in the house, but more importantly, they often constitute the major portion of the fuel load when a fire is initiated in a room. A single sofa or even a single-seat fully upholstered lounge chair containing a large volume of highly flammable foam can burn vigorously upon ignition by even a small open flame and quickly reach flashover and post flashover conditions. Furniture fire test data has clearly demonstrated that the bulk of the heat contained in an upholstered furniture item is contained within the filling materials, in particular polyurethane foam. Non-fire resistant polyurethane foam is extremely flammable and will easily ignite and burn rapidly when contacted with a small open flame. In addition, when ignited, the upholstery cover fabric acts as a secondary ignition source for the foam substrate if the filling components are not protected. A sofa containing a large volume of non fire resistant foam could quickly reach beyond flashover conditions, in excess of 2-5 MW heat release rates leaving the occupants with little or no escape time.

Moreover, upholstery fabrics such as heavy polyolefin's and synthetic blends that are highly smolder resistant and will easily pass the CPSC's proposed standard, are highly flammable and will easily ignite with a small open flame and can by themselves, i.e. even without contribution of the filling contents, constitute a substantial amount of fuel load and cause serious fires when ignited by an open flame. The Bureau's research data has shown that, a sofa containing only a highly flammable fabric with inert (non-combustible) filling content, can reach peak heat release rates in excess of 335 kW and a total heat release of 150 MJ when ignited with a small open flame. That amount of heat is directly from the burning of the cover fabric alone.

Because fillings in most articles of furniture, especially fully upholstered furniture contain ample fuel that can cause flashover of a typical room, avoidance of fill involvement is critical to minimization of fire growth and avoidance of a worst-case fire. Thus, the impact of propagation of a fire due to filling involvement should not be discounted. Improvements in the fire performance of filling materials or preventing the fire from reaching them (fire barriers) are essential to a safer standard.

Problems with CPSC's proposed standard

1. Deficiencies of the proposed standard

While a small portion of existing upholstery fabrics may demonstrate some resistance to ignition from small open flames, the vast majority of fabrics and nearly all synthetic or mostly synthetic upholstery fabrics can easily ignite with a small open flame while the same fabrics can easily pass a cigarette smoldering test. Under the CPSC's proposed standard, the Type I

upholstered furniture containing non fire retardant foam, does not require any further testing when it contains any smolder resistant fabrics. Such furniture poses a very serious open flame fire hazard and constitutes a large volume of highly flammable fuel in a room. Considering the fact that many open flame furniture fires are caused by small children playing with matches or lighters, the seriousness of such hazard can not be overstated.

In order to prevent fast developing fires once ignition has occurred, the Bureau believes that the filling contents of upholstered furniture must be either resistant to small open flame or it must be protected by an effective fire barrier. Manufacturers must be given the choice of either using fire resistant fillings that are proven to be also safe in regards to health effects, or using fire barriers, to fully encase the highly flammable non-FR foams inside their furniture. The successful experience of residential mattresses meeting the federal standard 16 CFR 1633 (and TB 603 in California prior to that) is excellent evidence that the upholstered furniture can also be made fire safe by using similar techniques and technologies.

Today, many brands of highly fire resistant, affordable and environmentally safe fire barriers, in the forms of fabrics, pads or battings are available for furniture manufacturers to use in making their furniture highly fire safe. Many such products, particularly pads and battings can simply replace the standard synthetic battings that are often wrapped around foam pads that are used in upholstered furniture.

The national furniture flammability standard must include an open flame fire barrier test that can be similar to the CPSC's proposed test for the Type II furniture with some modifications. In addition, loose fill components such as shredded foams, must also be encased in fire resistant tickings or barrier fabrics.

2. Revised TB 117 – A Start not the Final Solution

The Bureau of Home Furnishings has pioneered the development, adoption and enforcement of furniture and bedding flammability standards and is willing to assist the CPSC in developing a more effective and realistic furniture flammability standard. The proposed draft Technical Bulletin 117, dated February 2002, offered improvements in the performance of fabrics, fiber battings, polyurethane foams and loose fillings and included a composite test to allow use of a wider choice of fabrics. However, this revision was based on the research tests performed on materials and technologies that were available at that time (late 1990s and early 2000s). Since then a number of new developments have occurred that warrant a closer look at the revised draft standard and its provisions.

Since late 1990s and early 2000s, wide varieties of fire blocking barriers in the forms of soft padding, batting, and fabrics have come to the market that were not available at that time. Many of these materials are being successfully and affordably used in mattresses to meet the very stringent open flame test of 16 CFR 1633 and prior to that Technical Bulletin 603 in California. Nearly all mattress manufacturers use some kind of fire resistant padding materials in their mattresses to fully encase the highly flammable foams inside their mattresses in order

to pass 16 CFR 1633. This is done while maintaining the same level of comfort and esthetics that consumers enjoyed prior to implementation of 16 CFR 1633. In most cases, the manufacturers simply replaced their old non-FR pads with fire resistant ones. Most such barrier materials are made of inherent fire resistant fibers that are highly stable (do not break down into hazardous components used), do not pose any health risks to the consumers, and the mattresses and/or the mattresses outer fabrics do not require any added FR treatments. In addition, when TB 117 was revised, there was very little concern raised regarding fire retardant contents of the foams and their potential health risks. Therefore, use of fire retardant materials, especially foams, were incorporated into the revised TB 117 draft.

However, with the rising concerns about the adverse health effects of FR chemicals, the Bureau believes that fire safe upholstered furniture can be constructed using existing and emerging fire resistant technologies and materials while avoiding the use of any FR chemicals or treatments that may pose health hazards to the consumers. For example, successful compliance with the federal standard 16 CFR 1633 while using non-FR foams in mattresses due to emergence of vast varieties of inherently FR materials and technologies that are also environmentally safe, is a clear evidence that such an undertaking is feasible and economical.

In addition, a furniture flammability standard should also include provisions for an optional actual composite test of the finished article, if the manufacturer chooses such an option. In this way, furniture containing naturally fire resistant cover fabrics such as leather, wool, silk and their blends may be able to pass an open flame test of the furniture composite (on actual article or on a mock-up substitute) without the use of fire barriers, fire resistant fills or any FR treatments.

The Bureau believes that the 2002 revision of TB 117 can be further modified to accommodate all the provisions and concerns stated above while still offering significant improvement over the current 117 standard and serve as an effective, yet feasible and affordable national furniture flammability standard. Specifically, a fire barrier test method can be a major addition to that proposed test method. For the majority of fabrics that do not pass an open flame fabric test, either a fire barrier (with non-FR filling) or a fire resistant filling that is environmentally safe can be used, meaning no FR treatment of cover fabrics is necessary.

3. Field Enforcement Issues

CPSC's proposed standard is in effect only a fabric test, and in some cases, i.e. when smolder-prone fabrics are used, a barrier test is required that includes both a smoldering test and an open flame test . These compliance tests can be best performed by the material (fabric or barrier) suppliers before marketing their products. The proposed regulations do not stipulate provisions or alternatives for compliance verification (by enforcement authorities) on actual articles of upholstered furniture. Only provisions on extensive record keeping requirements are included in the proposed regulations. The large number of tests required for either the smoldering or open flame (for barriers) parts of the standard, makes it practically impossible to verify the compliance for even the largest size furniture. Obviously, without an effective and practical enforcement program and guidelines the effectiveness of any regulation will be in

doubt. The Bureau believes that while the main body of a proposed standard can primarily serve as a tool for the supplier and manufacturers to conduct and document compliance testing, either a clear program for field sampling and enforcement testing must be detailed or the local enforcement authorities or agencies must be given the authority and guidelines on how to enforce the proposed regulations. Again, the Bureau's long experience in field sampling and enforcement testing as well as the CPSC's 16 CFR 1633 experience, can serve as successful models for devising a practical and effective enforcement and compliance verification strategy.

References

1- U.S. Fire Administration/National Fire Data Center "Residential Fires and Child Casualties", Topical Fire Research Series, Volume 5 – Issue 2, April 2005.

2- U.S. Fire Administration/National Fire Data Center, "Multiple-Fatality Fires" Topical Fire Research Series, Volume 2, Issue 11, November 2001 (Rev. March 2002).

3- U.S. Fire Administration/National Fire Data Center "Fatal fires", Topical Fire Research Series, Volume 5 – Issue 1, March 2005.

4- U.S. Fire Administration/National Fire Data Center, "Candle Fires in Residential Structures" Topical Fire Research Series, Volume 6, Issue 1, July 2006.

Sincerely,

Laura Zuniga
Chief

HICKORY SPRINGS®
MANUFACTURING COMPANY

May 16, 2008

Office of the Secretary
Consumer Products Safety Commission
4330 East West Highway
Bethesda, MD 20814
cpsc-os@cpsc.gov

Re: Upholstered Furniture NPR

Dear Commissioners,

While we at Hickory Springs are generally encouraged by the design and intent of the March 4 proposed Standard for the Flammability of Residential Upholstered Furniture, we feel that a significant portion of the standard could be considered as restraint of trade. It also discourages new product development.

The proposed regulation specifies performance test §1634.4 to classify fabric. It also requires more demanding performance tests, §1634.5 and §1634.6, with use of Type II fabrics. Unfortunately, the standard deviates from its performance-based nature by mandating the use of "fire-resistant materials including, but not limited to, all interior fabrics or high loft battings..." that are "...interposed between the upholstery cover fabric and any interior filling material." This deviation is an anomaly within CFR 1634 that can be easily corrected.

Though such products may not currently exist, much developmental work is being conducted within the flexible polyurethane foam industry to develop "fire retardant" foams that address recent concerns regarding human health and toxicity. Enactment of CFR 1634 as presently written would severely hamper that R&D effort by effectively shrinking demand for fire retardant foam or other non-barrier fire retardant cushioning materials.

Leaving the test procedures of §1634.5 and §1634.6 intact for Type II furniture with one simple change - the removal of all references to interior fire barriers - would satisfy our request and leave the integrity of Type II furniture testing unchanged. The smolder and open-flame tests would be conducted with the chosen cushioning material(s), which may or may not include fire barriers. Pass/fail criteria does not need to be altered.

The changes suggested should encourage the development of all types of new cushioning materials and fire retardant additives.

Thank you for your consideration.

Sincerely,

Bobby Bush

Bobby Bush
VP- Foam & Environmental Technology
Hickory Springs Mfg. Co.
828-328-2213 x3407
bwbush@hickorysprings.com

the standard in safety

Underwriters
Laboratories

May 16, 2008

Office of the Secretary
U. S. Consumer Product Safety Commission
Room 502, 4330 East – West Highway
Bethesda, MD

Subject: Upholstered Furniture NPR

To Whom it May Concern:

This is to provide comment on the subject **Upholstered Furniture NPR** as published in the March 4, 2008 Federal Register. The Consumer Product Safety Commission (CPSC) is proposing flammability standards for residential upholstered furniture under the Flammable Fabrics Act (FFA). As drafted, the proposal would establish performance, certification, and labeling requirements for upholstered furniture. We understand that there are two proposed methods of compliance: 1) compliance with a cigarette ignition performance test when cover materials are used, and 2) compliance with smoldering and open flame resistance tests when fire barriers are employed between the cover fabric and interior filling materials.

Concerns with Methodology

Underwriters Laboratories Inc. (UL) applauds the CPSC for its efforts to increase public safety, particularly in the area of fire protection of upholstered furniture. Further we support flammability test requirements for upholstered furniture and fully embrace certification and labeling of these products to demonstrate continued compliance with test requirements.

However, it is UL's position that testing through a component mock-up approach provides only an incremental improvement in fire performance of upholstered furniture. Instead, fire tests for addressing upholstered furniture flammability can more effectively contribute to fire safety by taking into consideration real world conditions in terms of scale, materials, component synergy, ignition source (size and duration), ignition location, etc. This is because the fire hazard does not end with the upholstered product itself. It can ignite surrounding combustibles and lead to a flash over condition within the room.

Of further concern, the flammability of some plastics, such as structural components in frames, covers of padding etc., would not be addressed through these methods. When exposed to developing fire conditions, these materials have a tendency to become molten, drip and form liquid pools which when ignited result in rapid and high heat release rates.

Recent fire test demonstrations conducted by UL of end products labeled as complying with California TB 117 showed heat release rates exceeding flash over conditions (in excess of 1000 kW) in less than 4 minutes when exposed to a relatively small open flame ignition source. These demonstrations suggest that the fire hazard of upholstered furniture is not adequately evaluated through the assessment of components individually or in combination.

Underwriters Laboratories Inc.
333 Pfingsten Road, Northbrook, IL 60062-2096 USA
T: 847.272.8800 / F: 847.272.8129 / W: ul.com

While some stakeholders argue that furniture flammability cannot be assessed through an end product, open flame test due to an overwhelming number of fabric and construction combinations, the following factors should be considered:

- Testing at the end product level can be reasonable if worst case assessments are made of product variations based on sound Fire Protection Engineering Principles of material composition, assembly methods, fuel load, geometries, and ventilation.

- The concept described in 16 CFR 1633 of Qualified, Confirmed, and Subordinate prototyping to represent multiple upholstered furniture designs can be used to minimize the number of samples required to be subjected to fire tests.

Industry has also expressed concern that this type of testing is infeasible because of the large number of outer fabrics available to the consumer. The same concern was address by the mattress industry by the development of performance requirements based on sound fire protection engineering principles. Those performance requirements are now contained in 16 CFR 1633. Using the successful model of mattress flammability requirements to design a program to optimize safety for upholstered furniture would be a constructive method for CPSC to pursue in designing their requirements for upholstered furniture.

UL's Research Contribution

While we fully recognize the need for a federal mandate to mitigate the hazards associated with residential upholstered furniture exposure to small open flame and smoldering ignition sources, we do not believe that there is industry or stakeholder consensus on a federal standard that will readily address the hazards posed to consumers by smoldering and small open flame ignited upholstered furniture fires.

UL has undertaken an aggressive research program that embraces fundamental fire protection engineering principles for residential fire safety including composition, assembly methods, geometries, fuel load, effects of ventilation, sources of ignition, and the root cause of fires – human behavior. We are collaborating with a wide variety of key federal and state government agencies, academia, the fire service community, and industry.

UL's research program plan is a three-phase approach that is anticipated to take one year to 18-months to complete. Technical guidance committees have been assembled to assist in this research. Prior to and at the end of each phase, a meeting of the technical guidance committee will be convened to disseminate information and provide input to UL.

Phase one, underway, is an analysis of current state and includes a literature review of previous research, existing testing methodologies and discussions with researchers in the field. The literature review will include identification of areas for further study based upon previous work. For example, some of the previous work described test samples in general terms of size, weight, style and fabric type, but did not include details regarding layering of various support materials or chemical composition of the materials.

It is anticipated that the research will be conducted as phase two. The research will develop empirical data on end products under a product calorimeter using smoldering and small open flame ignition sources. The research will focus on the fundamental degradation mechanisms of materials (softening, liquefaction, charring, sublimation, etc.) on exposure to a variety of heat (ignition) sources. This information will provide insight into the reaction of upholstered furniture materials (and composite structures) during a fire. This is important considering the range of smoldering, non-flaming and flaming fire scenarios that occur in the home. Data will include video and still photographs, physical description of the test samples, peak heat release rate (kW) and total heat release rate (MJ). Multiple items of each design will be obtained to provide samples for conducting small scale and composite mock-up tests in accordance with

existing protocols to determine if these methods predict end product fire behavior. Analytical tests will be conducted on fabrics, foams, fillers and other synthetic materials to determine their chemical composition. The data will be analyzed to explore potential relationships to allow manufacturers to embrace the concepts in the 16 CFR 1633 mandate of Qualified, Confirmed, and Subordinate prototyping to represent multiple designs and minimize redundant testing.

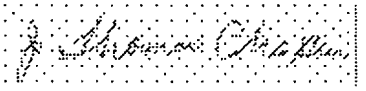
The planned third phase will include analyzation of the research data to develop recommendations.

The goal of the research is to build upon past experience and identify and address any gaps in previous work. The end result will provide stakeholders with data that may be used to establish a technically feasible and cost effective standard to address the hazard posed to consumers by smoldering and small open flame ignited upholstered furniture fires.

We strongly urge CPSC not to publish 16CFR1634 until the results of this research are known.

We appreciate the opportunity to provide comment. If you wish to discuss further, please feel free to contact me at your convenience.

Sincerely:



J. Thomas Chapin, PhD.
Director, Research and Development
Underwriters Laboratories, Inc.
847-664-3200
j.thomas.chapin@us.ul.com

Stevenson, Todd

From: Claire.A.Kammer@us.ul.com
Sent: Friday, May 16, 2008 8:42 AM
To: CPSC-OS
Subject: Upholstered Furniture NPR - UL Response
Attachments: Upholstered Furniture NPR - UL Comments May08.pdf

To Whom it May Concern:
Attached please find the **Upholstered Furniture NPR** as published in the March 4, 2008 Federal Register.

Should you have any questions or require the comments be submitted in another format, please do not hesitate to contact me.

Sincerely,
Claire A. Kammer
Manager, Government Affairs

Underwriters Laboratories, Inc.
1850 M Street, NW Suite 1000
Washington, DC 20036

Claire.A.Kammer@us.ul.com

Tel: (202) 296.8092
Fax (202) 872.1576
Cell (202) 374.3536

Updated Exemption 56

Founded 1976

ASIAN BUSINESS ASSOCIATION

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

Founded in 1976, the Asian Business Association (ABA) is a non-profit organization that has been proactively assisting Asian American small businesses to gain access to economic opportunities and advancement. We represent the views of Asian American business owners to local, state and federal government officials in order to promote and improve the business climate. ABA makes every effort to provide members with current information on business opportunities and outreach programs with major corporations and public agencies.

I am writing to express my concerns for the direction the CPSC is moving in lessening fire safety standards on residential furniture, thereby putting disadvantaged residents at an increased danger.

One issue that is not being talked about is how reducing certain fire retardants would disproportionately affect minorities, due to many minority communities also being low-income communities. These individuals will be financially unable to fulfill the necessary adjustments the CPSC proposal requires, making the proposal a direct threat to lower-income and minority communities.

The reduction in fire deaths over the years has been attributed to the use of approved and studied chemical flame retardants. To eliminate this important tool from the fire safety tool box will result in an increase in fire deaths and property damage. Chemical flame retardants are used to protect the foam as well as the covering fabric from both small open flames and smoldering ignition. While they do not put out fires, they do provide crucial added time for the occupants to leave the residence, thus saving lives.

Statistically, low-income and minority communities already experience a disproportionate number of fire-related deaths, and the CPSC proposal will only exacerbate an existing problem in those communities by eliminating flame retardants, the only defense these individuals have.

Over 84% of furniture designed with no protection in the foam tends to be the class of furniture that finds its way either in its original or second-hand form in lower income households who cannot afford the higher-value, barrier protected furniture.

To finalize a standard that will lead to high protection from fire for one end of the economic spectrum and a lesser standard for those at the lower end is not fire protection for all consumers. The CPSC should reconsider the stakeholder agreement from 2004, designed to protect the fabric and the foam, resulting in a standard that will provide the maximum protection to the public.

Sincerely,

Dennis Huang

Dennis Huang
Executive Director

CALIFORNIA ASIAN PACIFIC
CHAMBER OF COMMERCE
2012 H Street, Suite 202
Sacramento, CA 95811
T (916) 446-7863
E info@calasiancc.org

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

The California Asian Pacific Chamber of Commerce is a non-profit organization dedicated to advancing the interests of Asian Pacific American businesses in California.

I write to express my concerns regarding the direction the CPSC is moving in lessening fire safety standards on residential furniture, thereby putting disadvantaged residents at an increased danger.

Reducing fire retardants would disproportionately affect minorities, due to the fact that many minority communities also fall into low-income communities. These individuals will be financially unable to fulfill the necessary adjustments the CPSC proposal requires, making the proposal a direct threat to lower-income and minority communities.

Statistically, low-income and minority communities already experience a disproportionate number of fire-related deaths, and the CPSC proposal will only exacerbate an existing problem in those communities by eliminating flame retardants, the only defense these individuals have.

Please re-think this proposal and ensure that minority and low income communities retain adequate fire safety protections.

Sincerely,

R. Wayne Wong

R. Wayne Wong
Project Consultant

Asian Americans in Commercial Real Estate
444 S. Flower Street, Ste. 2150
Los Angeles, CA 90071

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

I am the Co-Chair of Asian Americans in Commercial Real Estate, which represents the interests of real estate professionals throughout California. Our mission is to keep our members up to date on issues of concern in the real estate industry and the Asian Pacific American community in general.

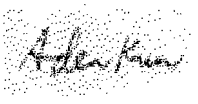
I am writing to express my concerns for the direction the CPSC is moving in lessening fire safety standards on residential furniture, thereby putting disadvantaged residents at an increased danger.

One issue that is not being talked about is how reducing certain fire retardants would disproportionately affect minorities, due to many minority communities also being low-income communities. These individuals will be financially unable to fulfill the necessary adjustments the CPSC proposal requires, making the proposal a direct threat to lower-income and minority communities.

Statistically, low-income and minority communities already experience a disproportionate number of fire-related deaths, and the CPSC proposal will only exacerbate an existing problem in those communities by eliminating flame retardants, the only defense these individuals have.

You must fulfill your promise to the American people to establish sound legislation that will protect every citizen and put their safety above all other concerns.

Sincerely,



Aden Kun
Co-Chair, Asian Americans In Commercial Real Estate

cc: cpsc-os@cpsc.gov

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Stevenson, Todd

From: Sherri Mesch [sherri-m@hotmail.com]
Sent: Friday, May 16, 2008 11:27 AM
To: CPSC-OS

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

I am writing to express my concerns for the direction the CPSC is moving towards in response to fire safety standards on residential furniture. I am alarmed by the proposed measures the CPSC is considering.
As a nurse, I have seen first-hand the devastating affects that burns have on both the survivor as well as the family.
Currently, fires starting on upholstered furniture and mattresses are responsible for over 35 percent of fire-related deaths, claiming the lives of up to 17 people each week. Despite this staggering statistic, the Commission is considering a measure to remove fire retardants in the foam of furniture. Fire-related injuries are some of the most costly and emotionally damaging injuries, and without appropriate fire retardant protection, the risk for fire-related deaths is unimaginable.
Approving this kind of measure would be a step in a very dangerous direction for the CPSC. For instance, the common residential flame retardant, Deca-BDE, is the most studied flame retardant in history.
In addition, after an exhaustive 10-year analysis by the European Union, it was found to be safe for continued use. The US EPA, the National Academy of Sciences and others have reached similar conclusions. To date, this type of legislation has been reviewed by 48 states and has been repeatedly turned down.
It is crucial that the CPSC understands that **the medical community stands on the side of fire safety** and opposes any action to lessen the existing fire safety standards.
The current flammability standards play a significant role in residential fire safety and the proposed measures to eliminate these effective fire prevention tools should be revisited by the CPSC.

Sincerely,

Sherri Mesch

58

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

I write to address the Consumer Product Safety Commission's Upholstered Furniture Flammability Recommendations and the danger it poses to both our citizens and firefighters.

I have kept myself updated on this issue, and have read about the great number of fires that begin with upholstered furniture. These fires result in damage, injuries and -- worst of all -- fatalities. Based on anecdotal evidence I have read and heard and the statistics on such fires, a solution is needed that will prevent, or at least lessen, the chances of injuries and fatalities. We need to ensure that furniture will burn more slowly in the event of a fire in order to increase the chances for protective measures.

The Recommendations of 16 C.F.R. 1634 from the Notice of Proposed Rulemaking (Federal Register / Vol. 73, No. 43 / Tuesday, March 4, 2008 / Proposed Rules) does not address this need, which is very concerning to me and many others. Cigarette testing, while useful, is <u>not</u> comprehensive, because fires are often started by other objects, such as candles.

Therefore, I plead with you to develop rules and recommendations that would give us, as citizens, and first responders, such as our firefighters, a real chance to save lives while providing protections from the horrible destruction a fire can cause.

Thank you for your time and attention.

Sincerely,

Hemanth C. Gundavaram
80 West Cedar Street, #1
Boston, MA 02114

Stevenson, Todd

From: Hemanth Gundavaram [hcgun@yahoo.com]
Sent: Friday, May 16, 2008 11:46 AM
To: CPSC-OS
Subject: Upholstered Furniture NPR

Attachments: Letter to CPSC.doc

Letter to CPSC.doc
(24 KB)

Please see the attached letter regarding the Consumer Product Safety Commission□s Upholstered Furniture Flammability Recommendations and the danger it poses to both our citizens and firefighters.

Thank you.

Sincerely,
Hemanth C. Gundavaram

ICL Industrial PRODUCTS AmeriBrom, Inc. 622 Emerson Road - Suite 500 - St. Louis, Missouri 63141 USA
Tel: (1) 877-661-4272 Fax: (1) 314-983-7610 www.icl-industrial.com info@ameribrom.icl-ip.com

May 16, 2008

Office of the Secretary
U.S. Consumer Product Safety Commission
4330 East West Highway
Room 502
Bethesda, MD 20814

To the Commission:

Subject: Upholstered Furniture NPR

This letter provides ICL-IP's comments on the proposed furniture flammability standard 16 CFR Part 1634 under the Flammable Fabrics Act.

ICL-Industrial Products is a leading manufacturer of flame retardants used in plastics and polyurethane foam. We have over 35 years of experience in evaluating the flammability of polyurethane foam. ICL-IP develops and produces flame retardants which offer effective and efficient fire safety while meeting established human health standards.

Based on our experience and evaluation of the proposed furniture standard, we urge the Commission not to adopt this proposed standard. We believe that the standard will not offer American families additional protection from fires. In several aspects, the proposed standard would be a step back in fire protection from current industry practice and state regulations.

The key flaw in the proposed regulation: it will allow furniture to be sold which does not adequately prevent the key fuel source – the flexible polyurethane foam – from igniting and becoming a large source of heat, leading to deaths and property destruction. All experts recognize that the greatest cause of catastrophe in a fire is high heat release leading to rapid fire progression and resulting in flash-over, at which point all combustible materials in the room suddenly ignite and burn generating intense heat. Flame retardants work to slow the time to ignition and decrease the rate of heat release, allowing the consumer to escape a catastrophe. By not adequately preventing the polyurethane foam from igniting or generating large amount of heat very rapidly, this proposed standard will increase the public exposure to this serious risk.

The briefing package asserts that one of the reasons to not require flame retardant foam is due to health and safety concerns. ICL-IP offers flame retardant solutions which do not require a trade-off in fire safety for human health and environmental concerns. These compounds are in-use today at major furniture foam manufacturers who produce foam meeting the California TB 117 standard. If the Commission adopts the proposed standard, manufacturers could discontinue use of these products, jeopardizing the safety of consumers nationally.

We have identified five areas of concern with the proposed standard, which we believe the Commission should ask its staff to address before proceeding:

1. Flawed and confusing test structure - The proposed standard would require cover fabrics for furniture to be either smolder or open flame resistant – but not both.

2. Proposed test does not reflect real-world conditions - The test uses a mock-up and a testing protocol which does not reflect real-world conditions. This approach has seriously flaws and if adopted, will result in a lower level of fire protection than current industry practice, for example in California with CA TB 106. The test proposed in this standard contrasts significantly from the recently implemented mattress flammability standard, where an actual product is tested.

3. Less fire protection under proposed standard – If adopted, the standard will allow furniture which has a lower level of fire protection than current furniture which meets the California TB 117 or the industry furniture industry (UFAC) standards.

4. Smolder-prone fabrics could be used– Lack of a smoldering requirement for fabrics used in some furniture (if they pass the barrier test) could allow re-introduction of dangerous fabrics which have been virtually withdrawn under the voluntary furniture industry (UFAC) tests.

5. Poor reporting and tracking - The proposed standard places primary responsibility for furniture flammability on textile producers. This opens many risks for American consumers.

Adopting this standard as a CPSC regulation would reduce the level of fire protection offered in current upholstered furniture. We believe the Commission should ask its staff to substantially modify the proposed standard before considering further action.

Flawed Test Structure

The proposed standard would result in two types of furniture in the market, based on fabric covering – Type I (passing a cigarette smoldering test) and Type II (incorporating a barrier fabric and subjected to a small open flame test). A manufacturer could choose to offer furniture meeting either type, depending on fabric choice. The Briefing Package envisions that over 80% of furniture will be classified as Type I.

By setting up the two tests for a manufacturer to choose, the standard could result in dangerous furniture being sold in the U.S. Type I furniture will pass a smoldering test, but not an open flame test. Type II furniture would pass an open flame test, but not a smoldering test. This structure will result in consumers purchasing unsafe furniture - since there is no comprehensive test for all furniture.

The proposed two-test standard is based on the assumption that mishandled smoking-materials are the main source of preventable fires in the U.S. This data is based on assumptions,

not measurement of real world fires. The most dangerous assumption is that cigarettes falling onto furniture are the main ignition source. This is an assumption – as the actual data often only record smoking materials as the ignition source. It is often simply not known whether a lit cigarette, lighter, or match was the cause of the ignition. The lack of an open flame standard required for Type I furniture will leave the consumers open to the risk that this assumption is incorrect.

We draw your attention to the recently compiled National Fire Protection Association (NFPA) data in their study *Home Fires That Began with Upholstered Furniture*. This data covers the period 2002-2005, and shows strikingly different results than the data included in the briefing package which is the basis for proposed standard.

As shown below, the new NFPA data shows that small open flame sources caused half the fires between 2002 and 2005, 24% of the deaths, and more than half the property damage. Of note, we adjusted this data to eliminate the "non-addressable" sources to make the data similar to the information in the November briefing package.

Percent Caused by Small Open Flame Ignition	CPSC November, 2007	NFPA April, 2008	**Difference**
Fires	31%	51%	**1.6x**
Deaths	10%	24%	**2.4x**
Injuries	35%	47%	**1.4x**
Property Damage	41%	55%	**1.3x**

Proposed Standard Offers Less Fire Safety Than Current Regulation

California TB 117 has been in place for almost 30 years and has been adopted by a number of manufacturers on a nation-wide basis. This standard includes an open flame test directly on the foam contained within the furniture. This standard has resulted in a reduction of fire deaths, fire injuries and fire losses, as reported by the CPSC and other organizations. Since CA TB 117 has been adopted by furniture manufacturers for units sold outside California, this standard has had the impact of increasing fire protection for families nationally.

Adoption of the standard proposed by CPSC would dilute the protection offered by CA TB 117. If the Briefing Package assumptions are correct, 80% of furniture would be Type I and would not required to pass an open flame test.

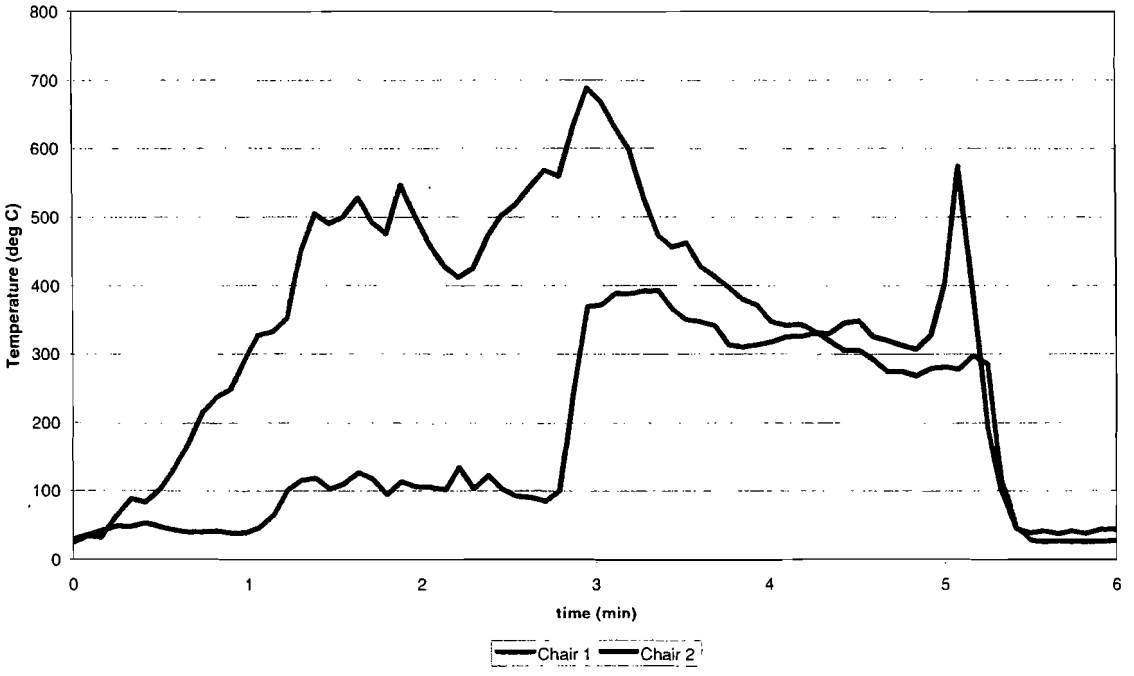
We believe the lack of an open flame test in the proposed standard is a serious flaw. To demonstrate this, we conducted two full scale fire tests on commercially purchased chairs. The cover fabrics in these two chairs were made with different fabric blends: Chair 1 - 35% cotton/65% polyester and Chair 2 - 55% polyester/45% rayon.

Both chairs successfully passed the cigarette smoldering test contained in the proposed standard. However, both seriously failed when an open flame was applied and caused self-propagating fires that had to be extinguished manually by the lab.

As shown by the data below, the application of a small open flame (such as a match) to the chair resulted in immediate ignition, high heat and smoke release, and very high temperatures near the chair. In fact, the chairs generated flaming droplets and material burning on the floor, so combustion continued and would easily have ignited drapes (or curtains) or other combustible materials that are typically found close to chairs in most homes.

The lab measured temperature values which exceeded 300 degrees Celsius (and exceeded 600 degrees F) within less than 2 minutes for one of the chairs and within less than 3 minutes for the other chair. Moreover, both chairs produced heat enough to exceed temperatures of 1,000 degrees F in their vicinity, before the lab had to extinguish the fire. The graph in Figure 1 shows how the chairs, and especially the polyurethane foam in them, quickly generate very high temperatures.

Figure 1: Full Scale Flaming Tests of Chairs: Temperature (6 inches from ignition point)

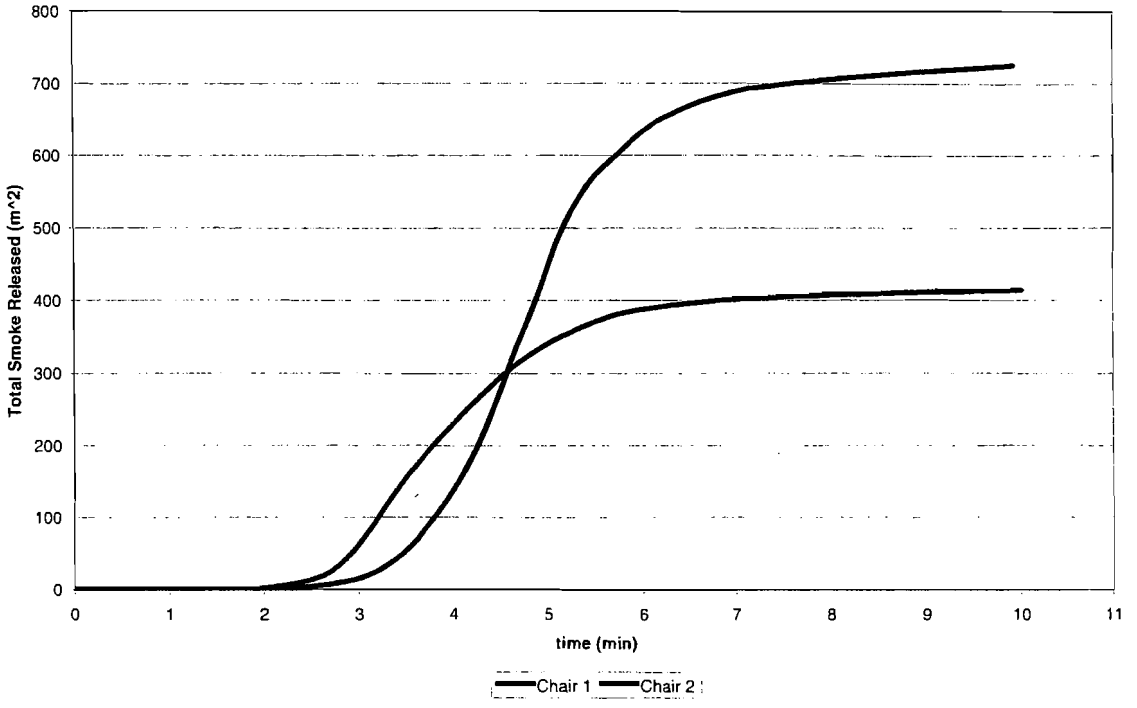


The heat released by the chairs was also extremely high. Both of these chairs weighed only some 40 pounds (including less than 10 pounds of combustible materials) and yet chair 2 released some 40 MJ at a rate up to 400 kW by the time the fire was extinguished. This means that this small chair alone was close to providing enough heat to get a small room to flashover (which typically requires 1,000 kW only).

Perhaps even more important, as shown in the chart in Figure 2 below, the fire rapidly generated high levels of smoke. In fact, the levels of smoke generated were such that visibility in the test room was very low. A large amount of smoke (which will always contain toxic compounds) will reduce visibility during a fire and severely limit escape and rescue. The chairs tested (which are typical) released high levels of smoke quickly – within 2-3 minutes. Of note,

this test was conducted on a chair – a larger couch or sofa would generate at least 2-3 times the amount of smoke.

Figure 2: Full Scale Flaming Tests of Chairs: Smoke



The polyurethane foam contained within these chairs was responsible for the heat released, the smoke generated and the high temperatures found.

Of particular concern is furniture purchased at retail but used, inappropriately, in applications such as schools. Currently, consumers can rely on the national availability of California TB 117 – compliant furniture for such locations. This could result in perilous fires in higher occupancy locations. This concern is compounded by the test design – which does not evaluate the risk presented by low density polyurethane foam, commonly used in furniture.

Adopting the proposed standard has the potential to be used as a pre-emption of California TB 117 and that would imply a major change in the staff's economic analysis presented in the briefing package. As it is possible that the proposed standard would pre-empt CA TB 117, the economic analysis should include an increase in fire deaths, injuries, and damages under the proposed standard in comparison to the 2005 standard.

We believe the Commission should ask the staff to re-evaluate the economic analysis in light of the potential for pre-emption of California TB 117 and of the fire protection it offers consumers nationally.

Type I Smoldering Test Unrealistic and Unvalidated

Beside the lack of an open flame test requirement for Type I furniture, the proposed smoldering test does not reflect real world conditions and has not been validated as predictive of real-world outcomes.

A typical fire scenario is one where a smoldering fabric leads to a flare-up, which then ignites the non flame-retarded foam under the fabric, leading to deadly flashover in the room. The highly controlled test (a mock-up with a foam density of 1.8 pounds per cubic foot) proposed for the standard does not reflect real world conditions. For example, if the furniture was an open chair design, with a space between the chair back and seat, increased air flow will lead to greater fire risk.

Furthermore, a substantial amount of furniture sold in the US today contains polyurethane foam at a density well below that of 1.8 pounds per cubic feet, as manufacturers look to sell products at lower price points. Lower density foam is easier to ignite, as the more coarse foam has more surface area and exposure to flame. Much of this low density foam is bought by lower-income households – including families with young children. The proposed standard would increase the fire risk to these households.

The briefing package does not offer any validation of the mock up test in the proposed standard. Under the standard, a fabric which passes the smoldering test could be used by a furniture manufacturer, even with a lower density foam or in an open-back design – risks not measured by the test. In this way, the test could result in a substantial amount of furniture sold which would not have any protection against rapid spread of fire in case of ignition.

We believe the Commission should ask its staff to conduct large scale validation of the proposed Type I test in real world conditions before proceeding on rule-making.

Type II Open Flame Test Does Not Protect Against Smoldering

Type II furniture would be offered if the manufacturer chooses a cover fabric which cannot pass the Type I test, but includes a barrier fabric to prevent measured weight loss in the foam.

Type II furniture would be very dangerous in the home. A lit cigarette can cause fabric smoldering to continue for up to 4-6 hours if not stopped. Moreover, smoldering on the furniture seat could easily ignite other surrounding materials, such as pillows or drapery. Alarmingly, the proposed standard could allow the re-introduction of fabrics which have not been used since the industry UFAC standard was implemented.

We believe the Commission should ask its staff to tighten the proposed standard to include a smoldering test for Type II furniture to prevent these outcomes.

Type I Test Relies on Textile Producers

Type I furniture could be sold if the manufacturer uses cover fabric purchased from a supplier who certifies the material using a one-time test. Our experience in evaluating furniture flammability has shown that smoldering behavior is highly variable between fabrics – especially those with different weaves but the same textile composition. This is borne out by the data in the Briefing Package presented by the staff to the CPSC.

At a recent industry workshop, CPSC staff explained that the burden of testing will fall on the fabric manufacturer to offer furniture makers Type I tested cover fabrics. There are several problems with relying on the fabric manufacturer to administer the standard:

1. The standard requires multiple tests of an individual fabric design, but does not require a random sample of fabric to be tested. Variability in a textile roll – or between rolls – will not be evaluated.

2. There is no follow-up testing required. If the weave or composition of the fabric changes in the course of production, this change will not be required to be retested. From a practical matter, there is no criterion in the proposed standard for testing different fabric.

3. Imported fabric used by domestic furniture manufacturers or imported furniture would rely on testing conducted outside the U.S. Recent experience with drug, tire, and toy testing in China shows that foreign testing is not reliable and has resulted in misrepresentation of compliance.

4. There is no centralized reporting of the results to CPSC, as there are in other standards. The result could be that a pattern of fires emerges in the market, but CPSC is unable to trace the chain to the responsible manufacturer and recall dangerous material used in units produced by multiple furniture manufacturers.

We believe the Commission should ask the staff to revise the proposed standard to include follow-up testing, centralized reporting, and verification of foreign testing.

* * *

Flame retardant solutions for flexible polyurethane foams are available today which do not require a trade-off in public fire safety due to human health and environmental concerns. ICL-IP offers several of these solutions which are in use today. These products are not persistent or bio-accumulative in the environment and have been favorably evaluated by the EPA on a number of human health, eco-toxicity, and environmental criteria.

In light of these flame retardant solutions, we urge the CPSC to modify the proposed standard to eliminate the flaws outlined above. The best outcome for fire protection for the American consumer is furniture which has passed both an open flame and smoldering test. This is readily achievable in the industry today.

Sincerely,

Bob Raymond
Vice President

CALIFORNIA MANUFACTURERS & TECHNOLOGY ASSOCIATION

May 16, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Dear Chairman Nord:

I am writing on behalf of the California Manufacturers & Technology Association (CMTA) to express our concern regarding the direction the CPSC is taking to weaken fire safety standards in California.

The Commission issued a proposed standard in November, 2007, for residential upholstered furniture that is substantially less stringent than California's existing furniture flammability standards. It would not apply to the most flammable components of upholstered furniture and does not include an open flame test, used for decades under California's performance-based standard to simulate actual sources of ignition common in residential settings. This standard, if adopted as is, would preempt the California standard and set a precedent for less protective standards for a broader range of commercial and consumer products.

We are also concerned that the Commission's proposal is predicated on the false premise that all flame retardant chemicals are harmful to humans, animals and the environment. In fact, the CPSC proposal specifically states that the standard should not rely on use of chemical flame retardants, and in so doing sends a message to manufacturers that they should discontinue use of products that have proven effective in significantly reducing incidence of residential fires, related deaths and injuries. This statement also disregards the CPSC's own research on flame retardant chemicals, leading to a determination in 1998 that half of the 16 substances tested were effective and safe for use in residential product applications.

Corporations have a social responsibility to distribute products that meet the highest standards of consumer safety. The CPSC should not adopt standards that erect regulatory barriers to achieving this objective. The current proposal would create a gap in public fire protection, and thus represents a very real threat to public health and safety that vastly eclipses any theoretical risk associated with incidental exposure to flame retardant chemicals.

In 2004, fire-fighters, physicians, environmentalists and manufacturers reached consensus on a proposal that would provide maximum fire protection for the public and preserve flexibility for manufacturers in order to ensure consistently safe, high quality products. We recommend the Commission issue a new proposal that incorporates this consensus approach, and which will not preempt proven measures already in place, such as in California.

Sincerely,

Mike Rogge
Policy Director, Environmental Quality

cc: cpsc-os@cpsc.gov

California Manufacturers & Technology Association
1115 Eleventh Street
Sacramento, CA 95814
PH 916.441.5420 FAX 916.447.9401

Stevenson, Todd

From: Hull [mhull@cmta.net]
Sent: Friday, May 16, 2008 6:28 PM
To: CPSC-OS
Cc: Mike Rogge
Subject: Consumer Product Safety Commission proposed flammability standard
Attachments: CPSCLTTR_COMMISSION.doc

To Whom It May Concern:

The attached letter responds to a draft standard issued recently by the Consumer Product Safety Commission that would pre-empt California's existing residential furniture flammability standard and set a number of dangerous precedents. We understand the comments are due to the Commission by May 19th.

Feel free to contact me if you have any questions regarding the letter.

Sincerely,

Marisa Melendez-Hull
Assistant to Mike Rogge

--
Marisa Melendez-Hull
Legislative Assistant
California Manufacturers
& Technology Association
1115 11th Street
Sacramento, CA 95814

Phone: 916-498-3321
Fax: 916-447-9401
mhull@cmta.net

Stevenson, Todd

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From: Barbara McQuiddy [choctawmama@yahoo.com]
Sent: Friday, May 16, 2008 7:46 PM
To: CPSC-OS
Subject: RE: Upholstered Furniture

Dear Commissioner
We applaud the excellent work of the Consumer Product Safety Commission in developing the proposed rule, ?Standard for the Flammability of Residential Upholstered Furniture? (16 CFR Part 1634) without a small open flame standard for foam.

Historically, small open flame standards for foam have been met with a series of toxic chemicals such as pentaBDE and chlorinated tris or chemicals lacking adequate health information such as Firemaster 550. Many of these chemicals are known to migrate out of furniture and are found in dust, humans, pets, wild animals and the environment. In animal studies, a number of these chemicals can cause thyroid abnormalities, endocrine disruption, cancer and adverse neurological and reproductive condition such as reduced sperm count, infertility, hyperactivity and learning disabilities.

The current smoldering ignition performance standard for fabrics and other upholstery cover materials should not have a potential adverse impact on health and the environment as would a small open flame standard for foam. However, we are concerned that potentially toxic fire retardant chemicals such as decabromodiphenyl ether (decaBDE) and hexabromocyclododecane (HBCD) could be applied to the back-coating of upholstery fabric to meet this smoldering ignition performance standard.

CPSC should require that any chemical flame retardant chemicals to be used in any consumer product such as furniture are fully tested by the manufacturer for potential human health and environmental effects and evaluated for potential lifecycle impacts BEFORE they are used to any manner that could result in with exposure to humans. CPSC should then evaluate the results of these studies to determine whether the proposed use of the chemical is appropriate and safe. Further, labeling of the product for flame retardants should be required to provide information to consumers.

We appreciate the Commission?s support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of increasing human and environmental exposure to potentially toxic fire retardant chemicals for which there is inadequate health and safety information.

Thank you.

Sincerely,

Barbara McQuiddy
9501 E. Broadway Road #73
Mesa, AZ 85208

ALBEMARLE®
CORPORATION

451 Florida Street
Baton Rouge, Louisiana 70801-1765

Telephone: 225-388-8011
Facsimile: 225-388-7270

May 16, 2008

Office of the Secretary,
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Comments Related to 16 CFR Part 1634 – Standard for the Flammability of Residential Upholstered; Proposed Rule

These comments are provided in response to the 16 CFR 1634 proposed rule for the Flammability of Upholstered Furniture, published in the Federal Register on March 4, 2008, pp. 11702 – 11752.

Chemical flame retardants are used to protect the foam as well as the covering fabric from both small open flames and smoldering ignition. While they do not put out fires, they do provide crucial added time for the occupants to leave the residence thus saving lives. The reduction in fire deaths over the years has been attributed to the use of approved and studied chemical flame retardants. To eliminate this important tool from the fire safety toolbox will result in an increase in fire deaths and property damage.

In 1991, the National Association of State Fire Marshals petitioned the Consumer Product Safety Commission to develop a standard to deal with flammability issues related to residential upholstered furniture. This was in response to the high incidence of deaths due to fires caused by small open flames and smoldering cigarettes. Since that time, the Commission has made several proposals dealing with one element or another of the problem but has failed to come up with a comprehensive standard that has the support of the furniture industry while allowing for the highest levels of fire safety.

In 2004, all of the stakeholders, in an effort to move the CPSC along, reached consensus on a standard to which all could comply that would make sure all parts of a piece of furniture are flame retarded. This would include the covering textile and the foam. To only treat one or the other would not solve the problem of furniture fires. Ignoring this consensus, the CPSC staff continued to release proposal after proposal either calling for treating the covering fabric or the foam but not the entire piece of furniture.

In November of 2007, the Commission staff made another proposal. This proposal deals only with the covering fabric and does not require the foam – which is the most flammable – to be treated for flame retardancy. The proposal states that 84% of the textiles today can handle smoldering from cigarettes without causing fire. For the remaining 16% of the textiles (things like silk) which are found on high end furniture, barrier fabric can be used encasing the foam.

ALBEMARLE®
CORPORATION

The flaws with this proposal are many:

- Not all furniture fires are caused by cigarettes and this proposal ignores the continued risk of fire from open flame (matches, lighters, sparks, etc). In terms of cigarettes, if the lit cigarette is left on the furniture, eventually it will burn through and catch the foam on fire causing flash over. This is NOT a sound fire safety standard.

- The 84% of furniture designed with no protection in the foam unfortunately tends to be the class of furniture that finds its way either in its original or second-hand form in lower income households who cannot afford the higher-value, barrier protected furniture.

- Even for the 16% of high end furniture that the CPSC says would require barrier fabric, the furniture would only be as flame protected as the integrity of the barrier. If the barrier is not put together well (leaving gaps around the foam) or it is punctured by pets, children or other causes, the furniture is NO LONGER flame retarded.

- CPSC has designed a standard based on a smolder/cigarette ignition, and has chosen to ignore the open-flame (lighters, matches, candles, etc.) ignition sources even though these account for significant property damage, injuries, and deaths each year. Fire-safe cigarettes are becoming the norm in the U.S. and are expected to have 100% market share by 2010, yet this proposed standard is based upon old style, non-fire-safe cigarettes. In fact, the non-fire-safe Pall Mall brand cigarette called for in the standard is no longer even manufactured. Meanwhile, open-flame risks will always be present, and yet are not even accounted for in the proposed standard.

- The CPSC reviewed in 1998 the 16 chemical flame retardants that could be used to meet a flammability standard. 8 of those 16 were deemed safe and effective for use. For the CPSC to now say chemical flame retardants do not need to be used to meet a standard is irresponsible. While the staff proposal does not specifically say chemical flame retardants should not be used, their statement that a standard should not rely on chemical flame retardants will result in foam manufacturers discontinuing use of this important safety product.

The CPSC should reconsider the stakeholder agreement from 2004, designed to protect the fabric and the foam, resulting in a standard that will provide the maximum protection to the public. To finalize a standard that will lead to high protection from fire for one end of the economic spectrum and a lesser standard for those at the lower end is NOT fire protection for all consumers.

Respectfully Submitted,

Shannon Reed
Albemarle Corporation

Stevenson, Todd

From: Shannon_Reed@albemarle.com
Sent: Friday, May 16, 2008 1:18 PM
To: CPSC-OS
Subject: Comments to the 16 CFR Part 1634 Standard for the Flammability of Residential Upholstered Furniture
Attachments: CPSC Comments May 16.doc.pdf

Please find attached comments to the 16 CFR Part 1634, Standard for the Flammability of Residential Upholstered Furniture, Proposed Rule:

Thank you,

Shannon Reed

Shannon Reed | Market Manager – Construction and Furnishings Flame Retardants
Albemarle Corporation | 451 Florida Street | Baton Rouge LA 70801
☎ Office: 225.388.8980 | ☎ Mobile: 225.252.3470 | 🖷 225.388.8985
✉ shannon.reed@albemarle.com

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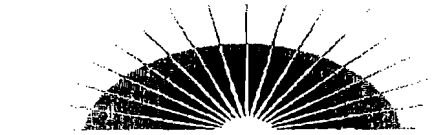


FLICKER OF HOPE FOUNDATION

Brightening the Future for Burn Survivors

May 17, 2008

Office of the Secretary
Consumer Products Safety Commission
4330 East West Highway
Bethesda, MD 20814

Subject: Upholstered Furniture NPR

To the Commission:

I appreciate the opportunity to express to the U.S. Consumer Product Safety Commission my views on the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture."

I am very concerned with the rule as stated because it largely fails to address the concern of both small open flame ignitions and the protection of filling materials. Deaths from ignition of upholstered furniture have been responsible for more residential fire deaths than any other product under the CPSC's jurisdiction. At present, such fires translate into the deaths of up to 17 people each week. Without adequate fire protection, this statistic would certainly skyrocket.

I am a survivor of harrowing burn injury sustained in my crib as a six-week old infant. That fire robbed me of my right hand, much of my left hand and caused significant facial disfigurement. I understand all too well the physical and emotional pain that burn survivors endure and have established Flicker of Hope Foundation to help other survivors, and their families, deal with the many challenges that result from their injuries. A traumatic burn is the most painful experience the human body can sustain and survive.

I urge you to consider the additional real and horrific consequences that not *may*, but *will* occur if these concerns are not comprehensively addressed. The one thing that is more frustrating than the injury itself is knowing that such an injury might have been prevented.

8624 Janet Lane • Vienna, Virginia 22180 • Phone 703-698-1626 • Fax 703-573-6940 • www.flickerofhope.org • info@flickerofhope.org

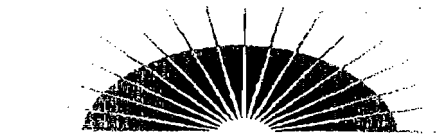
The Commission
CPSC
May 17, 2008
Page Two

You have the opportunity to prevent the deaths of thousands of Americans, and the unimaginable pain and disfigurement of thousands more by properly re-crafting "Standard for the Flammability of Residential Upholstered Furniture" so that it ensures the protection of cover and filling materials in upholstered furniture. I implore you to do so.

Sincerely

David M. Borowski

David M. Borowski
Executive Director



FLICKER OF HOPE
FOUNDATION
Brightening the Future for Burn Survivors

FAX TRANSMITTAL SHEET

DATE: May 19, 2008

TO: The Commission
CPSC
301-504-0127

FR: Mr. David M. Borowski
Executive Director

RE: Upholstered Furniture NPR

8624 Janet Lane • Vienna, Virginia 22180 • Phone 703-698-1626 • Fax 703-573-6940 • www.flickerofhope.org • info@flickerofhope.org

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Stevenson, Todd

From: Joan Blades [joan@moveon.org]
Sent: Saturday, May 17, 2008 10:54 AM
To: CPSC-OS
Subject: Upholstered Furniture NPR

May 15, 2008

Office of the Secretary

Consumer Product Safety Commission

4330 East West Highway, Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

We applaud the excellent work of the Consumer Product Safety Commission in developing the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) without a small open flame standard for foam.

Historically, small open flame standards for foam have been met with a series of toxic fire retardant chemicals such as pentaBDE and chlorinated tris or chemicals lacking adequate health information such as Firemaster 550. Many of these chemicals are known to migrate out of furniture and are found in dust, humans, pets, wild animals and the environment. Due to the relatively high flammability standards in effect in the U.S., U.S. women have some of the highest levels of fire retardant chemicals found in their breast milk in the world, and our babies have the highest levels of human exposure.

Health effects include the potential for bioaccumulation and persistence, especially in children, and in animal studies, it has been shown that a number of these chemicals can cause thyroid abnormalities, endocrine disruption, cancer and adverse neurological and reproductive conditions such as reduced sperm count, infertility, hyperactivity and learning disabilities. Recent U.S. EPA studies identify this as an area of concern, and point to large data gaps for human health and environmental safety for all of the fire retardant chemicals currently used in furniture and many children's products.

The proposed smoldering ignition performance standard for fabrics and other upholstery cover materials should not have the potential adverse impact on health and the environment that a small open flame standard for foam would. However, we are concerned that potentially toxic fire retardant chemicals such as decabromodiphenyl ether (decaBDE) and hexabromocyclododecane (HBCD) could be applied to the back-coating of upholstery fabric to meet this smoldering ignition performance

standard.

CPSC should require that any chemical flame retardant chemicals to be used in any consumer product such as furniture and children's furnishings be fully tested by the manufacturer for potential human health and environmental effects and evaluated for potential lifecycle impacts BEFORE they are used in any manner that could result in exposure to humans. CPSC should evaluate the results of these studies to determine whether the proposed use of the chemical is appropriate and safe. Further, labeling of products containing flame retardants should be required to provide full disclosure of information to consumers.

Reducing sources of ignition is a much safer and more effective means of reducing fire hazards than using fire retardant chemicals. Laws in 22 U.S. states and Canada currently require cigarettes to be constructed so that they will self-extinguish if left unattended. Early estimates from New York State suggest that RIP cigarettes will cause a 50 to 67 percent reduction in fire deaths. On October 25, 2007, Reynolds American Inc. announced a product-wide transition to RIP cigarettes. Fire scientists predict RIP cigarettes will be universal in the US within two years. In addition, fire safe candles will reduce the frequency of candle fires.

We appreciate the Commission's support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of increasing human and environmental exposure to potentially toxic fire retardant chemicals for which there is inadequate health and safety information.

Thank you

Sincerely,

Joan Blades

Co-founder and Pres. MomsRising.org

COMMENTS ON

THE NOTICE OF PROPOSED RULEMAKING

TO MANDATE FLAMMABILITY STANDARDS FOR

RESIDENTIAL UPHOLSTERED FURNITURE

FROM

THE UPHOLSTERED FURNITURE ACTION COUNCIL

(UFAC)

May 17, 2008

"UPHOLSTERED FURNITURE NPR"

I. INTRODUCTION

In November 2007, the staff of the United States Consumer Product Safety Commission ("CPSC") submitted a briefing package entitled *Regulatory Alternatives for Upholstered Furniture Flammability*. This was the most recent of many staff briefing packages that presented different proposals for Commission consideration to address the fire risk and hazard of upholstered furniture, a highly complex subject. However, it was the first to emphasize the risk of smolder ignition as the priority rather than small open flame ignition. After a briefing in December 2007, the Commission voted in February 2008 to issue a Notice of Proposed Rulemaking ("NPR") and invited comment thereon. This submission is in response to that invitation as it appeared in the Federal Register of March 4, 2008.

II. UFAC'S POSITION

The Upholstered Furniture Action Council ("UFAC") is pleased that the Commission has rearranged its rulemaking priorities to accord with the injury data. CPSC's Notice of Proposed Rulemaking now acknowledges that the greater risk of death or serious personal injury to consumers is posed by smoldering cigarette ignition and not by the small open flame ignition of upholstery. This comports with the fire data that cigarette ignition remains the primary cause of residential fires that start in upholstered furniture and confirms the need for a federal standard that focuses on minimizing the risk of fire from smoldering cigarettes igniting a piece of upholstered furniture.

The CPSC has proposed a standard that UFAC believes could be workable. However, the proposed rule makes many assumptions that have yet to be proved. Test data needs to be developed to see if these assumptions hold up to scientific scrutiny. Other areas need to be clarified and/or validated as well. UFAC stands ready to assist the Commission with the research that is a prerequisite for a valid final rule.

III. DISCUSSION

A. ASTM/UFAC Voluntary Standard

The ASTM/UFAC voluntary standard[1] has been in use since 1978 and is generally acknowledged to have been very successful in reducing the number of fires associated with the cigarette ignition of upholstery.[2] During the past thirty years, it has transformed the upholstery industry by introducing smolder-resistant materials and construction criteria into the production of upholstery and eliminating the use of many smolder prone

[1] By this, we refer to ASTM E1353 which adopted the UFAC construction criteria in 1990.
[2] Sharman, L.J. and Hoebel, J. F., Memorandum to Thomas W. Murr, October 26, 1989.

materials from the marketplace.[3] The results did not accrue overnight, because of the long life of upholstery, but the progress has been steady as compliant furniture has replaced non-compliant upholstery. Since the implementation of the UFAC program, cigarette-ignited upholstered furniture fires have declined by approximately 80%. And while certainly not all of this decline can be attributed solely to UFAC, we believe that a substantial portion is the direct result of the ASTM/UFAC voluntary standard.

Dr. Mark Berkman has worked to quantify more precisely the contribution of the UFAC program to improvements in the fire data. His analysis begins with the observation that cigarette-ignited furniture fires have declined more rapidly than cigarette fires involving other products (about 8.9% annually vs. about 5.1% annually since 1983). Assuming the difference in these rates of declines is attributable to changes in furniture construction over this period, he concludes that the UFAC program has saved hundreds of lives.

CPSC testing over the years has demonstrated significant industry compliance, i.e. 85%, with the ASTM/UFAC voluntary standard, which was achieved through substantial investment of time and resources by industry organizations.[4] However, UFAC notes that a rising tide of imports produced in foreign plants having little involvement with domestic furniture associations will likely make those levels difficult to sustain or improve upon under a voluntary regimen. While some imported products tend to comply with the ASTM/UFAC voluntary standard, others are not compliant due to lack of smolder-resistant cushion wraps, warning labels, and other shortcomings. This is the principal reason UFAC supports the adoption of a national mandatory flammability standard for upholstered furniture.

B. More Work Needs to be Done

In its briefing package, the CPSC staff makes many assertions about various limitations of the ASTM/UFAC voluntary standard. The CPSC staff maintains that the ASTM/UFAC voluntary standard allows the use of smolder-prone cover fabrics in combination with more smolder-resistant materials but that these smolder-prone cover fabrics can defeat the inherent smolder-resistant materials and permit the fabric to progress to flaming combustion over time. The CPSC staff suggests that its test method will prevent this. UFAC looks forward to reviewing the staff's data on this point.

The CPSC staff asserts that the ASTM/UFAC tests do not adequately characterize the smoldering behavior of all upholstery materials. The CPSC test data on this point will make a significant contribution to this area of research. It would be extremely helpful if CPSC staff would develop a database of its testing results for cotton fabrics. This would help us determine if the staff's statistics about the classification of cellulosic fabrics according the UFAC test method is correct.

---

[3] 73 Fed. Reg. 11,706 (March 4, 2008).

[4] U.S. CPSC, *Regulatory Options Briefing Package on Upholstered Furniture Flammability*, October 28, 1997, p. 7.

We are concerned that the CPSC testing might have been done on too limited a number of upholstery pieces and/or fabrics. We hope that the staff has a good start, but we wonder about the depth of the staff's test data on the fire performance of a wide range of disparate fabrics such as 100% chenille, woven velvets, flat dobbys, flat jacquards, tufted velvets or even printed fabrics, especially the synergy of these cover fabrics with the various construction materials.

More testing is needed to establish the repeatability and reproducibility of the proposed standard. Unlike the ASTM/UFAC voluntary standard which has been subjected to several national round robin tests to determine its precision and repeatability, none of the CPSC proposed test methods have received such scrutiny. It is critical that the agency conduct such testing so that there is confidence that the proposed rule will actually be effective in reducing the smoldering and small open flame ignition propensities of upholstered furniture. The UFAC test methods have been shown to be repeatable from lab to lab and reproducible within the lab to a repeatability of 85%. As a mandatory standard, the CPSC test methods certainly should equal or exceed that number.

UFAC stands ready to assist the agency in this round robin testing and analysis of the results, the validation testing, as well as any full scale testing to determine the correlation between the small scale tests and full scale performance of the furniture.

C. Recommendations

Based on the CPSC test data referenced in the NPR, it seems that there is common agreement on the smolder-ignition resistance of certain types of fibers. It appears that the Commission staff believes that thermoplastic, vinyl, wool, and leather will all pass the proposed smoldering ignition resistance test. The staff also indicates that lightweight cellulosic fabrics under eight ounces per square yard will pass. The potential failures are predicted with fabrics woven entirely of cellulosic fibers that are heavier than eight ounces per square yard.[5] To alleviate part of the huge testing burden that the proposed rule will place on the upholstery fabric manufacturers, the Commission might consider a grandfather provision for the fiber types which it is confident will pass the proposed smoldering ignition resistance test. A UFAC Class I test report could provide a safe harbor for these materials. This would allow the limited resources of the upholstery fabric manufacturers and the limited number of test facilities to focus on the heavier weight cellulosic fabrics that the agency believes might pose a problem.

We suggest that the Commission staff think about adding a requirement for third party testing for this proposed rule. Two trends prompt this suggestion. First, more and more finished upholstery pieces are being manufactured by foreign entities and imported into this country. Second, domestic furniture manufacturers are sourcing textiles from all over the world. Many of our members have reported fifty or more foreign textile mills from whom they obtain fabrics. It would cut down on the number of tests (and retests) if the domestic furniture manufacturers and retailers could reasonably rely upon the test

[5] Id.

results of CPSC-accredited foreign laboratories. The agency currently has this authority under Section 14 of the Consumer Product Safety Act, 15 U.S.C. 2063. There is no comparable provision in the Flammable Fabrics Act, 15 U.S.C. 1191. However, the pending CPSC reauthorization legislation would extend CPSC's authority to require independent third party testing by accredited laboratories to products regulated under any act enforced by the Commission.

The UFAC hang tag, revised with the aid of Prof. James O'Reilly of the University of Cincinnati Law School, has performed an important consumer education function. The warning language on the hang tag provides the essential fire safety message to avoid fires in the home and to install and maintain smoke detectors. It also instructs consumers to avoid exposure of the upholstered product to matches, lighters and candles and warns that, in the event of a fire, the upholstery can burn rapidly and may produce toxic gas and thick smoke. The proposed standard will require a label that contains the name and location of manufacturer, month and year of manufacture, model identification, Type 1 or Type II identification, and a statement of certification. It does not contain any other consumer education information which we believe is a serious omission.

The Commission may promulgate a mandatory labeling rule under Section 27(e), and such a rule would require manufacturers to attach permanent warning labels to their upholstered products. Such a labeling approach would address the small open flame risk in a meaningful way, without implicating the unreliable performance and risk tradeoffs connected with construction changes and chemical treatment. Ultimately, CPSC should permit the mandatory label to be combined with the state tagging law label as it has done with the mattress flammability standard.

We also noted that re-upholsterers are exempt from the standard if they are recovering a furniture item for the consumer's own use. The exemption will work to the disadvantage of upholstery manufacturers who receive COM [6] orders from consumers. Given the international travel that many consumers do, it is not unusual for them to bring fabrics home from all over the world. Many of these fabrics are expensive and unique, some even hand-loomed. Under the proposed rule, if the consumer asks a furniture manufacturer to use the fabric to cover a new sofa or chair, the furniture manufacturer will have two choices: either asks for additional material to have a burn test conducted or assume that it is a Class II fabric and use it with a qualified barrier. Both of these choices will pose additional expense to the consumer who may be unwilling to bear the costs. Instead the consumer merely has to take the fabric to a re-upholsterer and use it to cover furniture that he or she already owns. To create a level playing field, the Commission should offer the furniture manufacturer a similar exemption, provided that the manufacturer obtains a written waiver from the consumer that he or she authorizes the construction of the furniture notwithstanding its non-compliance with the flammability standard. A label could even be required for such a COM order stating that it was custom made and does not comply with the standard.

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[6] COM stands for customer own material.

D. The Impact of Reduced-IP Cigarettes

The staff study to evaluate the reduction in smoldering ignition propensity associated with reduced-IP cigarettes compared to conventional cigarettes is a significant development which UFAC applauds. UFAC has long been in favor of reduced-IP cigarettes as another step toward reducing the likelihood of smoldering ignition of upholstered furniture. The preliminary statistics from the states that have mandated reduced-IP cigarettes are encouraging. UFAC expects that this study will show that these reduced-IP cigarettes lower the level of risk from smoldering ignition significantly. If this occurs, then reduced-IP cigarettes should replace the current standard cigarettes as the source of ignition for the smolder test.

IV. CONCLUSION

As we have stated previously, a flammability standard that produces upholstered furniture that is safe, effective and saleable is the principal goal of UFAC. The 2007 draft standard represents a potential workable solution to the highly complex problem of smoldering and small open flame ignition of upholstered furniture. As Commissioner Thomas Moore stated, the proposal "does appear to be a starting point for improving the fire resistance of upholstered furniture".[7] We should not allow the perfect to be the enemy of the good in this case.

Of course, more needs to be done to see if the test methods proposed by the NPR will accurately characterize the wide range of cover fabrics used in upholstery and are repeatable as well as reproducible. Round robin tests should provide the answer to the latter. Likewise, full scale testing is desirable so that we are certain that the CPSC proposed standard will be more effective than the ASTM/UFAC voluntary standard. UFAC remains committed to working with CPSC to address the issues associated with smoldering and small open flame ignition of upholstered furniture from a technical and practical standpoint.

[7] Statement of the Honorable Thomas H. Moore on the Regulatory Alternatives to Address the Flammability of Upholstered Furniture, December 27, 2007.

Stevenson, Todd

From: Mary Martha McNamara [mmcnamara@mclh.com]
Sent: Saturday, May 17, 2008 2:02 PM
To: CPSC-OS
Cc: Ray, Dale
Subject: "Upholstered Furniture NPR"

Attachments: UFAC's Comments on the NPR 5.17.pdf

UFAC's Comments on the NPR 5.1...

Attached hereto are the comments of UFAC on the Commission's NPR on Upholstered Furniture. Please acknowledge receipt. Thank you so much for your assistance.

Mary Martha McNamara
McNamara & L'Heureux, P.C.
6094 Franconia Road, Suite B
Alexandria, VA 22310
(P) 703-971-8702
(F) 703-971-8707

E-Mail: mmcnamara@mclh.com

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Stevenson, Todd

From: Barbara Schultheis [Barbara.Schultheis@sfgov.org]
Sent: Sunday, May 18, 2008 11:10 PM
To: CPSC-OS
Subject: CPSC NAtional Flammability Standard

To whom it may concern:

I am writing to voice support for the new CPSC NAtional Flammability Standard that is being proposed. Based on the high cancer rates that firefighters are experiencing, I am pleased to see that there is some effort being made to reduce the use of fire retardants, while still providing furniture that will be less likely to contribute considerably to a fire situation. The use of toxic fire retardants creates a problem, rather than fixing one. As an American citizen, I demand that I be given a choice of whether or not toxic chemicals are applied to my bedding and furniture.

Barbara Schultheis
Fire Marshal
San Francisco Fire Department
698 2nd St.
San Francisco, CA 94107
(415) 558-3320 ph.
(415) 558-3322 fax

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Stevenson, Todd

From: Tony Bowman [nothinglefttodo@hotmail.com]
Sent: Monday, May 19, 2008 2:12 AM
To: CPSC-OS
Subject: Flame Retardant Products

May 18, 2008
Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

To Whom It May Concern:

I am writing to express my concerns for the direction the Commission is moving towards in response to fire safety standards on residential furniture.

Fire safety is of utmost importance to me. As a firefighter, I have dedicated my time to helping educate the citizens of my area about the dangers of residential fires and the steps they can take to help prevent them. When a residential fire does occur, every second is critical.

One of the most effective tools we have in residential fire safety are flame retardant products within the home. Fire retardants add crucial time for residents to leave a house during a fire, as well as minimize the potential reach of the flames. There are many distributing warehouses in the district that I work in that store hundreds of residentail funiture products for their business. With such a heavy fire load in these warehouses without flame retardant products there is potential for severe danger.

Your Commission has the power to establish fire safety standards for residential products that can save the lives of both citizens and firefighters. Unfortunately, I understand the Commission is considering removing fire retardants from the foam in furniture.

I am disappointed in the Commission for the direction you are moving in and because I understand that in 1991, the National Association of State Fire Marshals petitioned the Commission to develop a standard to deal with flammability issues related to residential upholstered furniture. We are still waiting for a comprehensive proposal.

The current flammability standards play a significant role in residential fire safety and the proposed measures to eliminate these effective tools should be revisited by the Commission.

Sincerely,

Tony Bowman
8403 Locust Ave Apt F1
Bonney Lake, WA 98391

Craftex Mills
DESIGNING AND WEAVING FINE FABRICS

2100 Market Street
Auburn, PA 17922-9738 USA
Tel: (570) 366-0534
Fax: (570) 366-2589
craftex.com

May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Subject: Upholstered Furniture NPR

Dear Mr. Secretary:

Craftex Mills is a third generation family owned textile fabric producer that has been in the domestic production of textile fabrics for over 100 years. We are a small business having fewer then 150 employees. All of these employees are based in the USA and we import less than 2% of our fabric into the US market. The comments that follow represent our concerns with the Consumer Products Safety Commissions proposed Standard for Upholstered Furniture Flammability.

The current proposed standard would directly affect over 4,500 separate fabric patterns that we supply to the furniture market. Many of these decorative fabrics are comprised of diverse fiber blends and constructions and our average yards produced per year per style is less than 120 yards. We also create over 1,500 new designs each year.

Craftex Mills is supportive of a National Standard that would result in significant fire safety improvements, but after reviewing the current document, the current Voluntary Upholstered Furniture Action Council (UFAC) test program provides improved levels of safety for the majority of fabrics in today's market place. This standard goes beyond the UFAC program resulting in an increased cost burden in order to provide a higher level of safety to a far smaller subset of fabrics that are perceived to be unsafe.

Expert witnesses have openly shared with us that they have rarely been involved with any litigation involving heavyweight, highly cellulosic fabrics during the past twenty year. However, the current proposal will not affect over 85% of the fabrics and furniture constructions that may be prone to fire safety concerns. Therefore, we quickly conclude that this proposal will have no affect on consumer safety beyond those already provided by the UFAC program.

For the past five years there has been an increase in the use of Fire Retardant polyurethane foams mainly due to liability concerns. The proposed standard would result in less FR foam being used and we argue would result in more lives lost, not fewer.

The standard also doesn't address the fact that over 76% of the United States is currently protected to a higher level because of the widespread use of Reduced Ignition Propensity cigarettes. Evidence suggests that these RIP cigarettes will have a far wider impact to furniture safety then the proposed standard would. However, the standard specifies a standard cigarette that is no longer available on the market place. The test ignition source should represent the current risk – RIP cigarettes.

The standard also addresses the staffs concerned with battings and barriers that are qualified under the UFAC program. To provide a higher level of safety, the standard has incorporated a large, 240 mm flame test to qualify barrier fabrics. Considering that cellulosic fabrics are generally more open flame fire safe when compared to most synthetic blends, we do not see the logic in specifying such a barrier for such a small group of fabrics. When furniture is properly constructed using cellulosic fabrics and smolder resistant barriers, the cigarette will not progress to flaming mode. If smoldering ignition is the primary focus of this standard, then a barrier or batting qualifying smoldering test, that uses a "worst case" cellulosic fabric, should be developed. Staff has expressed their concerns with battings and barriers that currently meet UFAC requirements. Maybe the overall answer is in improving the smoldering tests that would be used to qualify these smolder only battings/barriers that would then result in providing a higher degree of safety to a larger subset of UFAC Type 2 fabrics.

Craftex will continue to support a meaningful National Flammability Standard that will result in improved furniture fire safety. The current proposed standard does not meet this objective.

Sincerely,

Craftex Mills
David Ryan
Director of Quality

Comments of
The American Home Furnishings Alliance
(AHFA)

On

The U.S. Consumer Product Safety Commission's Notice of Proposed Rulemaking on Upholstered Furniture Flammability

May 19, 2008

The American Home Furnishings Alliance (AHFA) is pleased to provide comments in response to the March 4, 2008 Federal Register Notice (Volume 73, Number 43 Page 11701-11752).

AHFA represents manufacturers and importers of residential furnishings, including upholstered furniture, wood furniture, home office, and decorative accessories. AHFA companies participate in a highly competitive market characterized by ever-changing style preferences, margin pressures, and the tendency of consumers to postpone big-ticket purchases if their perceptions of value and function are not met.

Introduction

At the outset, we commend the staff for focusing the proposed standard on smoldering ignition risks, the predominant risk associated with upholstered furniture and the one that most readily responds to changes in furniture construction. Consistently over time, CPSC statistics show that approximately 90% of upholstered furniture fires result from smoldering ignition. The UFAC program (the foundation of which is ASTM E 1353) has demonstrated that fabric and yarn changes and the use of substrates between fabric and foam can yield improved smolder performance. While smolder-focused, the proposed rule does provide for the use of barriers that would be both smolder and open flame resistant. CPSC staff believes that its rule would be significantly more protective than the UFAC program, because it relies on what Bureau Veritas calls "relatively simple but stringent performance tests" for both outer fabric and barriers. [1]

Small Open Flame Research

The present emphasis on smoldering ignition is a sensible response to the unworkability of small open flame approaches considered during the course of the rulemaking. Early on in the project, staff found that reformulated foam cushions used to comply with TB-117 and BS 5852 did not meaningfully improve small open flame performance. [2] Subsequent testing of so-called "TB 117 plus" foam revealed that it actually performed worse than conventional foam in some smoldering scenarios. [3] Leading foam manufacturers reported significant variability in test results, and cautioned that they could consistently qualify only the most expensive and least commercially acceptable foams in a limited range of densities. [4]

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[1] Bureau Veritas, *CPSC Proposes Upholstered Furniture Flammability Standard*, February 2008, www.bureauveritas.com.

[2] U.S. CPSC, *Regulatory Options Briefing Package on Upholstered Furniture Flammability*, October 28, 1997, p. 27; Project Manager Dale R. Ray, *Briefing on Upholstered Furniture Flammability Projects*, March 1996.

[3] U. S. CPSC, *Performance Criteria and Standard Materials for the CPSC Draft Upholstered Furniture Standard,* May 16, 2005, p. 18.

[4] Dr. Kurt Reimann, *Evaluation of Standard Cotton Velvet Fabric*, presented at the October 2005 PFA Technical Meeting in Charlestown, SC.

Likewise, fabrics treated to pass the 20-second open flame test of BS-5852 exhibited erratic fire performance. [5] A 2003 fabric industry proposal based on a five-second open flame test represented an effort to achieve more consistent flame resistance and functionality. However, CPSC staff concluded that this test was not sufficiently predictive of fabric performance in composite constructions.

A 2001 proposal allowed the use of flame-blocking interliners as protection against open flame ignition. However, CPSC staff has found that barrier materials perform inconsistently, depending on the cover fabrics and ignition sources to which they are exposed.[6] This finding is echoed by Alexander Morgan of the University of Dayton Research Institute, who contends "there is a lot of concern about barriers failing against ignition sources stronger than a cigarette." [7]

Research and Regulation of Flame Retardants

The staff should also be commended for crafting a standard to minimize reliance on FR chemical treatments. Unlike cigarette ignition resistance, small open flame resistance generally requires the treatment of fabrics and cushioning materials with bromine or chlorine compounds.[8] The widespread application of these chemicals to furniture components would certainly have resulted from the test methods proposed in the 1997, 2001 and 2004 briefing packages.

During the time that CPSC has been considering furniture flammability, evidence about the ecotoxicity and bioaccumulation of halogen flame retardants has reshaped thinking about fire and chemical risks. Restrictions on FR use and production enacted by national and state governments and international bodies are depleting the compliance toolbox of compounds equipped to achieve open flame resistance in furniture.

The use of pentabromo diphenyl ether, once the most common formulation for flame retarding polyurethane foam, has been ended by regulatory action in the U.S. and Europe. [9] Penta BDE and octa BDE are now candidates for inclusion in the United

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[5] Janet L. Brady, *A Study of the Effects of FR Backcoating on Selected Upholstery Fabrics*, Philadelphia College of Textiles, June 16, 1999.

[6] U.S. CPSC, *Evaluation of Test Method and Performance Criteria for Cigarette Ignition (Smoldering) Resistance of Upholstered Furniture Materials*, May 12, 2005.

[7] Quoted in *New Thinking on Flame Retardants*, Environmental Health Perspectives, Vol. 115, Number 5, May 2008, p. 212.

[8] U.S. EPA, *Environmental Profiles of Chemical Flame-Retardant Alternatives for Low-Density Polyurethane Foam,* September 2005.

[9] Ibid.

Nation's Stockholm Convention on Persistent Organic Pollutants, which globally bans chemicals found to bioaccumulate and pose risks to humans and the environment. [10]

The only PBDE still on the market in North America, is deca BDE, a fabric flame retardant effective across a full spectrum of fiber types. Critics of deca often cite evidence that it can degrade into more hazardous congeners that are already the subject of regulatory action.[11] In the last year, deca has been banned or substantially restricted in Washington State, Maine and the European Union.[12] Asian countries and other U.S. states are considering similar legislation. [13] Without deca, fabric mills indicate that achieving open flame resistance would require the commercialization and testing of more specialized chemical formulations geared to particular fabric types.[14]

Environmental authorities and policy makers now appear to be moving toward restrictions on bromine and chlorine FR's generally. This is a response as well as to the detection of a variety of FR's in household dust.[15] The California legislature continues its consideration of legislation (AB 706) directing the state's Bureau of Home Furnishings to revise TB-117 to end reliance on these chemicals. In the present federal rulemaking, environmental advocates have urged CPSC to forego regulatory approaches that would encourage such chemical use.[16]

Other Trends Shaping Fire Statistics

The staff proposal and the discussion at the December 2007 briefing appropriately placed this rulemaking in the context of fire statistics that have been improving markedly in response to a number of trends. Americans are smoking less, and are increasingly protected by working smoke and carbon monoxide detectors. Small open flame statistics are being driven downward by the use of child-resistant lighters pursuant to CPSC regulations finalized in 1993. In addition, over half of the states have enacted requirements for reduced ignition propensity cigarettes, and other state legislatures are

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[10] *Unwelcome Guest: PBDE's in Indoor Dust*, Environmental Health Perspectives, Vol. 115, Number 5, May 2008, p. 204..

[11] Maine Bureau of Health; Maine Department of Environmental Protection, *Brominated Flame Retardants: A Report to the Joint Standing Committee on Natural Resources*, February 2005.

[12] *Europe Follows Washington in Ban on Flame Retardants*, Seattle Post Intelligencer April 4, 2008.

[13] *New Thinking on Flame Retardants*, Environmental Health Perspectives, Vol. 115, Number 5, May 2008, p. 211.

[14] Upholstered Furniture Flammability Stakeholder Meeting, Sheraton Crystal City, July 25, 2007.

[15] *New Thinking on Flame Retardants*, Environmental Health Perspectives, Vol. 115, Number 5, May 2008, p. 212.

[16] Citizens' Environmental Coalition, Clean New York et al, *Letter to Acting Chairman Nord and Commissioner Moore*, December 5, 2007.

expected to follow. All of these developments can be expected to further reduce residential fires associated with upholstered furniture.

Observations on NASFM's Comments

The National Association of State Fire Marshals (NASFM) contends that the proposed rule, with its emphasis on smoldering ignition, would represent a "step backwards" in fire protection because it would undercut current levels of compliance with TB-117 and TB-133.

NASFM is correct that a significant proportion of furniture sold outside of California complies with that standard. This is due to the inefficiencies of maintaining two separate foam supply chains, as well as the perception that TB-117 compliance provides consumers with added safety and may yield benefits in the event of personal injury lawsuits. Since these are business decisions unrelated to the current state of federal regulation, it is difficult to imagine how the promulgation of the proposed standard by CPSC would meaningfully change the current landscape. We believe it is more likely that less smolder prone fabrics and barrier constructions required by a federal rule would operate in concert with FR foam used in California and elsewhere. A more realistic threat to continued use of TB-117 foam appears to be the reconsideration of that law by the California legislature.

The claim that the proposed federal rule would undermine the use of TB-133 compliant furniture is likewise misplaced. TB-133 is required by California and several other states and jurisdictions for furniture in "public occupancies" such as hotels, nursing homes and prisons. Outside of those jurisdictions, some commercial architects and developers specify TB-133 furniture by contract. CPSC has jurisdiction only over products sold to retail consumers, so its rules would have no impact, preemptive or otherwise, on the procurement of TB-133 product in institutional settings.

The Proposed Smolder Test

One outgrowth of the movement toward reduced ignition propensity (RIP) cigarettes has been the decision by R.J. Reynolds Tobacco Company to discontinue production of Pall Malls. Pall Mall is the standard cigarette specified in smolder tests of furniture components, including the CPSC's proposed rule. Staff should consider identifying another standard cigarette. It appears that non-RIP cigarettes will soon disappear from the U.S. market and we recommend that CPSC specify a RIP cigarette as the testing standard. As Richard Gann of NIST recently observed, "cigarette ignition resistance [of upholstery] is going to be improved significantly" by RIP cigarettes,[17] and AHFA believes it is reasonable to model the test method to the real-world hazard that consumers will face.

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[17] Quoted in *New Thinking on Flame Retardants*, Environmental Health Perspectives, Vol. 115, Number 5, May 2008, p. 212.

One element of the Fabric Coalition proposal was the use of "unslickened" polyester cushion wraps, which experience suggests exhibit superior performance in relation to both smolder and open flame sources. CPSC should consider providing a second Type 1 test which considers the performance of fabric atop non-silicone treated polyester batting. Textile industry sources indicate that this will preserve the smolder resistance of the assembly while allowing the use of some decorative woven fabrics that would otherwise be lost to the market.

Compliance

Under the staff proposal, thousands of fabrics must be tested multiple times to determine their smolder classification. Domestic textile companies note that without sufficient lead time, this volume of testing will greatly exceed their in-house lab capacity. The result will be that more work contracted out to testing firms, at considerable expense.

In a departure from traditional smolder tests measuring char length, CPSC's test protocol requires the collection and weighing of fabric and foam assemblies following combustion. Accurate and repeatable performance of this procedure will be critical to the efficacy of the regulation, and education of technicians will be needed.

AHFA continues to obtain and evaluate barrier materials. The products now on the market are geared to compliance with the mattress regulation, and as such, lack the loft and resiliency needed for furniture applications. We hope that the proposed rule and the comments to it will provide a further signal to the marketplace about the performance characteristics required of barriers for the upholstery market.

The relatively complex and varied geometries of seating pieces will undoubtedly give rise to questions about the placement and attachment of barriers. For example, staff has indicated that Type II constructions will require barriers in the "sink" portion of the chair. This encompasses the horizontal and vertical cushions and the inside arms. Where loose cushions are concerned, however, both sides of the cushion would require barriers. As designers and upholsterers gain familiarity with barrier constructions, AHFA hopes to serve as a resource.

Based on these compliance challenges, we respectfully request that any final rule specify an effective date no sooner than 18-months from promulgation.

Conclusion

We appreciate the challenges that that CPSC has confronted in managing this rulemaking. Upholstered furniture features tens of thousands of fabrics with different performance characteristics, which interact variously with cushioning materials and seating geometries. Upholstered furniture flammability encompasses not only fire science, but consumer preferences, behavioral factors, the competitiveness of domestic industries and the increasing scrutiny of chemicals that pose risk to human health and the environment. The proposed rule is not perfect, but may represent what is

achievable at this point in time, given these sometimes competing factors. We look forward to working with the agency to validate the staff's findings and test methods, to make improvements where possible, and to assist our members with the compliance obligations they will face if a rule is finalized.

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Stevenson, Todd

From: Richard Driscoll [rdriscol@bifma.org]
Sent: Monday, May 19, 2008 9:56 AM
To: CPSC-OS
Cc: Randy Ruster; John Knust; Jeff Musculus
Subject: Proposed Rulemaking (NPR) on Upholstered Furniture Flammability

To: Mr. Dale Ray
Project Manager, Upholstered Furniture Flammability
Directorate for Economic Analysis
U.S. Consumer Product Safety Commission
4330 East-West Hwy., Rm. 600
Bethesda, MD USA 20814-4408

Dear Mr. Ray

This letter is in response to CPSC request for comments on the recently published notice of proposed rulemaking (NPR) on upholstered furniture that was published in the Federal Register.

BIFMA International is pleased to see that CPSC has taken the necessary step to establish a standard for upholstered furniture, and considered carefully the need to reduce the dependence upon fire retardant chemical additives for compliance. At this time, our industry has not had sufficient time to conduct enough testing to the proposed standard in order to fully understand the test method and submit complete comments. Our initial read, however, does allow us to offer the following comments:

1. We are concerned about the availability of the appropriate cigarette to perform the cigarette ignition test. The availability of the 85 mm unfiltered cigarette required for conducting the CPSC test was identified as a problem earlier in the year at the AHFA Furniture Workshop held in Greensboro NC on March 20, 2008. At that time, those of us in attendance were made aware that the manufacturer of the 85 mm unfiltered cigarette had announced that as of January 1, 2009, they will only produce that type of cigarette constructed to what is known as the reduced ignition propensity (RIP) construction. This cigarette, with the "speed bumps," will self-extinguish, if left unattended. It is our understanding that the manufacturer does not offer the 85 mm unfiltered cigarette for export, adding difficulty to anyone outside the USA who would want to conduct the testing to the proposed new standard.

2. We are unclear as to the exact requirements for product conformance labeling. BIFMA suggests that the requirements for labeling of complying product be embellished upon in the final text of the standard. There needs to be clearer statements of placement of the label, what information the label must contain, and any requirements for font size, colors, and combining with other furniture labels.

BIFMA is aware that this new standard is directed at residential upholstered furniture, however, since many BIFMA member companies market their products directly to consumer office products retail outlets such as Staples, Office Max, and Office Depot, we will suggest to them that those products will need to comply to the CPSC regulations. Likewise, we will suggest this to our member companies that have set up website capabilities for direct sales to consumers.

We welcome the development of a national furniture flammability standard that will override the need for development of Flammability standards by the individual states.

Best Regards,
Richard P. Driscoll
BIFMA International
(616) 285-3963

American Chemistry Council℠

May 19, 2008

Chairman Nancy Nord
Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Re: Comments on the Proposed Standard for the Flammability of Residential Upholstered Furniture, 73 Fed. Reg. 11701 (March 4, 2008)

Dear Chairman Nord:

I am writing on behalf of the Center for the Polyurethanes Industry (CPI) of the American Chemistry Council (ACC).[1] CPI offers these comments with the goal of improving the proposed furniture flammability standard. All stakeholders – including the American Home Furnishings Alliance and many others – support steps to reduce the number and severity of household fires. CPI specifically supports the development of a performance-based standard to achieve this end. But we also believe that such a legitimate performance-based standard must be robust, and therefore should not indiscriminately or arbitrarily exclude technologies that can help products satisfy the standard, such as the use of flame retardants, barrier materials, fabrics or other effective approaches.

CPI's position with respect to the development of a national flammability standard was announced in 2000 and is well documented (see www.americanchemistry.com/polyurethane for the entire position statement). In short, such a standard must be technically sound and performance-based, addressing the fire performance of finished products in scenarios designed to reflect real world conditions. Test selection and design also must be appropriately tailored to the actual and relevant hazard.

For nearly a decade, CPI has worked toward the development of possible test standards which could reduce fire deaths and injuries, and limit property damage, by working with industry groups and coalitions, conducting technical development work which has been shared with CPSC, promoting the use of fire and smoke detectors and fire suppressant systems, and contributing substantially to fire safety education.

We support development of a smoldering test standard as an important first step in the development and adoption of a comprehensive, national flammability standard for residential upholstered furniture. We do not believe, however, that stakeholder support for a smoldering test standard justifies any delay towards adoption of a stronger national open flame resistance standard.

If you have questions, please contact me or Neeva-Gayle Candelori, CPI Director at (703) 741-5654.

Sincerely,

Steve Russell

Steve Russell
Managing Director, Plastics Division

Attachment: *Comments on the Proposed Standard for the Flammability of Residential Upholstered Furniture*

[1] CPI represents U.S. producers or distributors of chemicals and equipment used to make polyurethane or are manufacturers of polyurethane products. CPI promotes the sustainable growth of the polyurethane industry, by identifying and managing issues that could impact the industry, in cooperation with user groups. The polyurethane industry is essential to U.S. economic growth. The business of polyurethane is a $56 billion enterprise, employing 220,000 Americans and creating nearly 4 additional jobs for each job in the polyurethane industry. The ACC represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing.

Comments of the American Chemistry Council's Center for the Polyurethane Industry (CPI) on the Consumer Products Safety Commission's (CPSC) Proposed Standard for the Flammability of Residential Upholstered Furniture

Additional Testing Should be Completed Before Issuing a Final Standard

A round robin test for each part of the flammability standard, including an evaluation of standard materials, should be completed before issuing a final standard. The round robin should comply with ASTM E691, "Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method." In addition, a laboratory monitor should be used to ensure that participating laboratories fully understand the outlined procedures.

Moreover, there is inadequate small to large scale validation testing for the smoldering standard. CPSC has conducted only limited large scale testing which has not adequately evaluated seat/back crevice designs and variable air flow in the vicinity of the smoldering cigarette.

The Center for Polyurethane Industry (CPI) recommends that these additional tests be completed before CPSC issues a final standard because the test results will inform the test procedures and approaches delineated in the proposed rule.

The Sections on Smoldering and Open Flame Tests, Procedures, and Standard Polyurethane (PU) Foam Should Be Modified

Regarding setting specifications for the standard polyurethane foam, Section 1634.14(c) (1) specifies the density as 1.8 lb/ft^3. Rather than a single number, however, a density range should be indicated. Section 1634.14(c)(4), "No flame retardant chemical treatment as determined by post-production chemical analysis " likely will entail a very expensive test to run for foamers producing the product, even though foam producers have control of the production process and formulations and will know if any flame-retardant treatment was included. Also, if the smoldering and open flame flammability specifications of Section 1634.14 are met, then the costly chemical analysis should not be necessary.

The mass loss required in the proposed open flame test for SPUF is >20% in less than 120 sec. after removal of the 5 sec. 35 mm butane ignition flame (Sec. 1634.14) when tested against the procedure specified in Section 1634.6 (see p. 11745). The wording in 1634.6 indicates that the mass of the mock up assembly be made initially and then noted when 20% mass loss occurs. It is unclear, however, whether 20% of the entire mock up or 20% mass loss of the polyurethane foam substrate itself is required. This is an important distinction and should be clarified. See, for example, p.11744, column 1, under (b) Summary of test method, "The mock up assembly must not exceed the mass loss limit." Also, under (m) Test procedure, (iv) at the top of column 1 on p. 11745, "Calculate and record the mass corresponding to 20% mass loss of initial mass of the mockup assembly." However, in other sections, e.g. 1634.14 (c) correct reference is made to mass: "The SPUF substrate shall have the following specifications:" CPI recommends that "standard polyurethane foam (SPUF) substrate" should be used instead of the term "entire mock up."

The metal test frame for the open flame tests described in Sec. 1634.21 states that the frame is to be made of a steel angle frame with steel mesh inside of the frame. Based on experience from earlier Alliance for the Polyurethanes Industry (currently CPI) flammability studies, the steel angle frame was quite heavy and difficult for some operators to position in the draft enclosure. CPI therefore recommends that CPSC allow for the use of an aluminum angle frame with the steel mesh between because it is more user friendly and performed well even with rather severe fires.

The CPSC smolder test uses a standard PU foam and not necessarily actual materials from the furniture piece in construction of the mock ups. This does not allow adequate testing of other materials such as batting that normally lie between the fabric and foam, not to mention filling materials such as blown in loose fiber, PU shredded foam or shredded fabric. In addition, furniture construction also contains layered PU foams of different types and densities. At the least, CPSC should have testing data that shows adequate correlation with flammability testing of these types of materials against the standard filling as described in the proposed standard.

It is possible that a smoldering cigarette could melt through some thermoplastic fabrics and polyethylene terephthalate (PET) batting to ignite polyurethane cushioning foam; some thermoplastic fabrics and battings will melt away from a heat source rather quickly, possibly exposing the PU foam. The risk of flaming ignition is expected to be greater than if non-flame resistant and possibly multi-density foam were used. These examples, however, underscore the need to test the actual materials used in furniture construction.

Seams Should Be Included in the Test Mock Up

No test provision for smoldering resistance of upholstery fabric seams or buttons on cushions is made. Seam construction, however, can have a large impact on flammability resistance. Thus, CPSC should include a seam in the test mock up. This recommendation is underscored by the fact that the new CPSC open flame flammability test standard for mattresses necessitated the development of new techniques or thread materials to ensure that mattresses would comply with the standard.

Section 1634.5 on Smoldering Test for Barriers Should Accommodate High Loft Type Materials and a Seam in the Barrier Material

Generally, the construction of test mock ups described in Sec. 1634.5 should not pose difficulties with a fabric type barrier. If the barrier is a high loft type, however, assembly is expected to be more difficult. CPSC should provide further direction for these situations.

Although CSPC has made efforts to improve the description of the cover fabric for the barrier tests and has worked with the fabric manufacturer to improve reliability, the cotton velvet fabric (Sec. 1634.15) has been shown in the past to be quite variable in flammability performance, particularly comparing various fabric lots. Thus, CPI recommends that either CPSC select a more consistent cover fabric for these tests or provide data that show excellent precision and bias in testing the standard fabric.

Moreover, a seam should be included in the barrier material being tested and its inclusion is more important than in the smoldering test for fabrics. If a barrier is to provide protection against ignition, a seam in that material should be shown to be resistant to ignition penetration.

The Proposed Standard Should Include the Open Flame Tests

CPSC fails to provide an adequate basis for eliminating the open flame requirements in the draft standard: "...in view of the hazard data and the complexity (including standard test materials variability) of the open flame tests, the proposed rule eliminates the open flame tests for filling materials entirely, and retains standard fabrics for barrier tests only." (p 11706)

The Open Flame Test for Barriers Should Include a Seam and Address Cotton Velvet Fabric

As noted above, the cotton velvet fabric has been shown in the past to be quite variable in flammability performance, particularly comparing various fabric lots. Thus, CPI recommends that either CPSC select a more consistent cover fabric for these tests or provide data that show excellent precision and bias in testing the standard fabric.

It is unclear whether heavier weight cellulosic fabrics that ignite from a smoldering cigarette cause breakthrough of the barrier and involve the filling materials. The heat release and heat release rate of some of these burning fabrics is greater than the 240 mm butane flame ignition source for the open flame barrier test. This presents a potential problem for filling material ignition which could lead to a flash over situation in a matter of minutes. Burning fabrics also pose a fire threat to nearby items such as throw pillows or curtains.

Also, some type of seam should be included in the open flame barrier test, a particularly important consideration when the barrier must exhibit resistance to open flame penetration.

Fabric Considerations Should Include Periodic Testing

Fabrics only have to pass the smolder test one time even though changes in weave or fabric composition could change the flammability characteristics of the fabric. By comparison, most PU foamers producing Cal. 117 foam today test every lot for flammability compliance. It is anticipated, therefore, that any foamer producing PU foam as a standard material for the CPSC testing also will test every lot of foam. Thus, CPI believes that upholstery fabrics should be tested on a periodic basis, rather than only once in their production lifetime.

Also, relying on foreign companies to self certify their fabrics for export to U.S. manufacturers may not be sufficient to provide the level of confidence and transparency required of US companies. Instead, CPSC should include a provision for adequate review of foreign test data and testing competence or periodic U.S. validation.

Compromised Fabrics and Items on Furniture May Increase Fire Risk

There is no protection of filling materials from compromised fabrics on furniture through wear, rips and tears, or vandalism. More heavily worn furniture fabrics would be expected to be present to a higher degree in lower socio-economic homes where smoking material ignitions would be more prevalent, as well as matches and lighters.

If either an upholstered piece of furniture or other material in a room becomes involved in a residential fire any other upholstered furniture in a room also may become involved and cause a rapid escalation of fire intensity leading to flash over in a relatively short amount of time. Although CPSC is using a mass loss calculation/requirement for its open flame test, which is similar to total heat release, and takes into account bed clothes allowing a larger open flame ignition source for the mattress, it is not heat release. CPSC does not take into account many of the 'top of furniture' items such as throw pillows or any coverings that may be present (not purchased originally as a furniture set) and lead to increased fire risk.

CPSC Relies on Invalid Fire Statistics and Economic Analyses

To validate the choice of a smolder only ignition source in the proposed rule, CPSC states that about 90% of fire fatalities where furniture is the first item ignited are due to smoking materials. CPSC further states that there are approximately 30 fire deaths per year due to small open flame ignition of upholstered furniture. In fact, the National Fire Protection Association (NFPA) is now reevaluating furniture fire death statistics and preliminary estimates show that only slightly more than half the deaths are due to smoking materials and more than double the CPSC estimate for open flame deaths. Other ignition sources include matches, candles, fireplace sparks, child play, wood stoves, ignition from equipment like space heaters and lighting as well as from electrical cords and plugs. In some ways, ignition from small open flames can be interpreted differently in that sparks from a heating source or an electrical malfunction could be considered small open flame sources. In many cases, these other ignition sources are more intense than a smoldering cigarette and could overcome furniture that complies with the proposed standard. If these statistics are used in the CPSC analysis of societal benefits from the proposed standard, the current CSPC approach may be closer to the earlier CPSC 2001 and 2005 draft standards.

The proposed standard focuses on smoldering ignition from cigarettes and correctly tests the impacted area of furniture. However, a test or other ignition types would need to address other areas of the furniture. For electrical ignition sources and others, it is more likely that the bottom or side of furniture would be exposed, *e.g.,* dust skirt where more air flow and perhaps decorative trim may be located.

The CPSC draft standards of 2001 and 2005 both indicated a very positive net benefit to society when using furniture materials that would most likely have to be protected with some level of flame retardants. (see p. 11730). The basic facts of furniture construction and fire risks have not changed substantially since then. The new NFPA furniture fire analysis indicates there has been approximately 75 fire deaths/year, not the 30 deaths that CSPC estimates, not to mention the additional fire injuries that NFPA has described. Assuming the NFPA numbers are accurate, CPSC's economic analyses to support the proposed standard are invalid. CPI recommends that CPSC conduct a new benefit assessment based on the NFPA data.

CPSC estimates that only about 14% of currently produced furniture is likely to fail the proposed standard and would need to have the fabric reengineered or use a barrier material. CPSC also estimates that only about 5% of furniture would actually be made with a barrier. With the proposed smoldering test so similar to the UFAC test (except for the barrier test and the loss of the other UFAC material tests) we question how the proposed standard would dramatically improve the fire fatality statistics of U.S. furniture. CPI recommends that CPSC provide a more detailed explanation of these predicted results/benefits.

Flame Retardants Have a Continuing Role in Upholstered Furniture

There have been considerable data developed on the health and safety of flame retardants used in PU foam, including the report of the National Academy of Science in 1998 showing that 8 of the 16 flame retardants studied were safe for use in furnishings. There also has been an EU Risk Assessment of several flame retardants used in PU foam which concluded , for example, that the widely used tris (1,3-dichloroisopropyl) phosphate or TDCP was safe for humans and the environment. In addition, the 2005 EPA Design for the Environment Study demonstrated that there was a low human health risk associated with some common furniture flame retardants. Moreover, the flame retardants used for upholstered furniture PU foam have been fully registered with the EPA and fully comply with EPA standards.

Either the CPSC 2001 or 2005 draft standard would have led to an increased use of flame retardants for both upholstery fabrics and PU foam. There were no significant health and environmental problems noted then that could not have been met by careful choice of available flame retardants. In addition, there are non-halogen flame retardants now on the market and considerable development work on others.

CPSC also has requested the National Toxicology Program of the Department of Health and Human Services perform a toxicology study on flame retardants that could be used in upholstered furniture. The outcome of this study, coupled with the NAS and other previous studies, may lead to an acceptable path for the use of flame retardants in upholstered furniture.

CPSC's Proposed Standard Could Lead to Lowered Fire Protection

The CPI is concerned that some furniture which is now protected by the Cal. 117 standard such as office furniture, hotel and motel seating, and furniture without a contiguous seat back may not have to comply with Cal. 117, resulting in less flammability protection. This effect would be magnified because much of the office furniture sold today outside of California is produced to the Cal. 117 standard.

A considerable amount of residential upholstered furniture produced for sale outside of California today complies with the smoldering and open flame parts of the Cal. 117 standard. Many furniture manufacturers today voluntarily produce furniture meeting the requirements of 117. As much as 40% of U.S. produced furniture may no longer need to meet the Cal. 117 open flame test (Section A) standard, leading to a loss of this added protection. To avoid this outcome, CPI recommends that the proposed standard replace Cal. 117 (Section D, smoldering) while allowing the continuance of Cal. 117 (Section A). This recommendation, however, will not address the potential loss of the Upholstered Furniture Action Council (UFAC) voluntary standards that require tests on other furniture materials besides fabric, for example, filling materials, deck padding under loose cushions, decorative trim and welt cords. This added protection could be lost under the proposed CPSC standard.

Stevenson, Todd

From: Candelori, Neeva-Gayle [Neeva_Candelori@americanchemistry.com]
Sent: Monday, May 19, 2008 10:29 AM
To: CPSC-OS
Cc: Kirks, Nancy
Subject: Upholstered Furniture NPR - Submission of Comments
Importance: High
Attachments: 2008-05-05-19 CPSC Final Comments Submitted to CPSC.pdf

Please accept this submission of comments by the Center for the Polyurethanes Industry of the American Chemistry Council on the proposed standard for the flammability of residential upholstered furniture. Please let me know if there are any problems with this submission.

Thank you.

Neeva-Gayle Candelori, Director
Center for the Polyurethanes Industry
of the American Chemistry Council
Tel: 703.741.5654

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Chemtura

David C. Sanders, Ph.D.
Director, Global Advocacy
Polymer Additives

Chemtura Corporation
1801 U.S. Highway 52 West
West Lafayette, Indiana 47906
765-497-6319 tel
765-497-6060 fax

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Subject: Upholstered Furniture NPR

To the Commission:

We strongly support increased national fire safety standards for upholstered furniture; however, we are very concerned that your newly proposed "Standard for the Flammability of Residential Upholstered Furniture" will not improve furniture fire safety, but will reduce it.

More than eighty percent of currently produced furniture already meets your proposed smolder standard. In other words, the proposed national standard will not result in a significant improvement in furniture fire safety. For that segment of the market for which that barriers would be used to meet the standard, there is every reason to believe that flame retarding the foam or filling is a necessary adjunct to barrier technology. There is a high likelihood of barrier breaching during normal use and especially as the furniture ages and moves into the second hand market.

If this weak national smolder standard is adopted, it is possible that furniture which is currently manufactured to meet the tough and effective Cal 117b requirements will be downgraded in fire safety, thereby increasing fire death and injuries. It is a proven fact that the Cal 117b standard has been effective in reducing fire deaths and injuries in the 25 years since its implementation.

With regard to the use of flame retardant chemicals to meet furniture fire safety standards, two separate reviews by CPSC and a review by the National Academy of Science have all found that increased fire safety far outweighs any concern over flame retardant exposure. With the broad array of safe flame retardant chemicals available today, there is no reason to avoid the improved fire safety offered by their use.

We recommend that the Commission seriously consider implementing Cal 117b as the national furniture fire safety standard. By doing this, a real improvement in fire safety will result in saved lives and avoidance of terrible non-fatal burns.

Sincerely,

David C Sanders

David C. Sanders, Ph.D.
Director Advocacy, Chemtura Corporation

Stevenson, Todd

From: Sanders, David [David.Sanders@chemtura.com]
Sent: Monday, May 19, 2008 10:31 AM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: CPCS letter.pdf

Attached please find Chemtura Corporation comments on the Upholstered Furniture NPR.

Dave Sanders
Director Advocacy
Chemtura Corporation

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Stevenson, Todd

From: Taffet, Richard S. [richard.taffet@bingham.com]
Sent: Monday, May 19, 2008 12:36 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: 72525814_1.pdf

Please find attached comments of the Decorative Fabrics Association in connection with the Notice of Proposed Rulemaking, published at 73 Federal Register 11702 March 4, 2008), in connection with a proposed flammability standard for residential upholstered furniture.

Thank you for your consideration of these comments.

<<72525814_1.pdf>>

Richard S. Taffet
T 212.705.7729
F 212.702.3603
C 914.582.2477
richard.taffet@bingham.com

BINGHAM
Bingham McCutchen LLP
399 Park Avenue
New York, New York 10022-4689

Comments of the
Decorative Fabric Association
to the
Consumer Product Safety Commission's
Upholstered Furniture NPR

May 19, 2008

Introduction

The Decorative Fabric Association ("DFA") respectfully submits these comments in response to the Notice of Proposed Rulemaking issued by the Consumer Product Safety Commission on March 4, 2008, 73 FR 11702, in connection with proposed flammability standards for residential upholstered furniture under the Flammable Fabric Act ("FFA").

Preliminarily, the DFA commends the CPSC staff for its diligence in addressing complex technical and economic issues as reflected in the instant NPR. The DFA has actively participated in, and it believes it has positively contributed to, the dialogue that has led to the instant NPR, and expressly notes that many of the DFA's concerns appear to be addressed and accommodated in the NPR. It bears emphasizing, however, that the DFA, which is comprised of the leading decorative fabric wholesalers in the United States, is not equipped to provide technical commentary or evaluation regarding the proposed standard as reflected in the NPR. Nor are DFA members expert in issues of yarn construction and other technical matters that may be relevant for purposes of evaluating the proposed standard. Rather, the DFA relies upon its suppliers and other industry participants for such expertise, and these comments by necessity defer to the issues that might be raised by such other industry participants in this regard, and particularly in connection with questions relating the cost and effectiveness of testing protocols.

Accordingly, consistent with the DFA's ongoing support for a uniform national residential upholstered furniture standard, but one that must be both technically effective and cost justified, the DFA submits these comments to the NPR.

Discussion

The DFA understands the NPR to propose a standard that would regulate two classes of residential upholstered furniture. Type I upholstered furniture would include cover fabrics that pass a prescribed smolder resistance test. The NPR proposes a test methodology for determining whether a cover fabric will comply with this smoldering test. Type II upholstered furniture would include an interior barrier that satisfies prescribed smolder and open flame tests, and any

cover fabric could be used for Type II furniture with a compliant barrier, regardless of whether it passes the smolder test required for Type I upholstered furniture.

As commented above, the DFA is not in a position to comment on the technical aspects of the proposed testing protocols. It is, however, very important for DFA members that any such testing not impose undue economic burdens on such members' suppliers. If the proposed testing and attendant recordkeeping requirements were to do so, it would simply create additional undue and unjustified costs that would be borne by consumers as reflected in the cost of finished upholstery furniture products.

A very important aspect of the proposed standard, as the DFA understands it, therefore is that cover fabrics used for Type II upholstered furniture would not have to be tested to establish that they do not qualify as Type I fabrics. Testing, and attendant recordkeeping requirements, for Type II upholstered furniture would only be in connection with the interior barrier used. Indeed, as the DFA understands, a standard cover fabric would be used for testing of the interior barrier.

In addition, the inclusion of the Type II option is of critical importance for DFA members because, as it has explained to the CPSC, much of the fabrics DFA members sell are comprised of cellulosic materials that (i) are less likely to pass a smolder resistance test, and therefore will not likely qualify under the smoldering test applicable for Type I furniture; and (ii) could not remain commercially viable if chemical or other topical FR treatments were required. Further, as commented, it is important for DFA members that the use of their fabrics in connection with Type II upholstered furniture not involve testing and recordkeeping requirements that would impose prohibitive and unnecessary costs. These fabrics are quite costly, and if they had to be tested it would involve enormous costs to consumers of Type II upholstered furniture. Such costs would only be exacerbated by the limited quantities of DFA members' fabrics, much of which would have to be consumed for testing purposes.

Regarding potential barrier materials, if such product is not commercially available - commercially available in this context meaning that the product is able to meet reasonable technical requirements and is made available at costs that permit its commercial success with consumers - DFA members' products would effectively be eliminated from the market. In connection with fabrics that would qualify for use with Type I upholstered furniture, to the extent that there is a demand for the supply of such fabric through DFA members, it too must be commercially available, and thus be subjected to reasonable testing and other requirements from the perspective of technical compliance and commercial viability. Likewise, therefore, it is of great interest to the DFA that suppliers of barriers and of fabrics that would qualify to be used in Type I upholstered furniture not be subjected to unsound or commercially infeasible testing and other requirements.

Specific Recommendations

In light of the foregoing, the DFA makes the following recommendations in connection with the proposed standard:

1. It has been brought to the DFA's attention that confusion exists whether there will exist testing, and attendant recordkeeping, requirements for cover fabrics to be used in Type II upholstered furniture that includes a compliant interior barrier. As stated, the DFA understands that no such requirements are being proposed. In light of the apparent confusion that may exist, however, the DFA suggests that any final rule state expressly that: **For Type II upholstered furniture, if a compliant interior barrier is used, any cover fabric may be used without any requirement that such cover fabric be subject to any flammability test or attendant recordkeeping requirements.**

2. As proposed, the standard would become effective 1 year after publication of the final rule. The DFA is concerned that if compliant interior barrier products are not commercially available at that time, it may not be possible for industry, and particularly furniture manufacturers using DFA members' fabrics, to implement the final rule. This would have the devastating impact on DFA members by eliminating their ability to sell the products that exist in the market and for which there is strong consumer demand. In effect, this will force DFA members to close their doors. Presently, the DFA understands that it is uncertain whether compliant barrier products are commercially available, or whether they will be 1 year after the effective date of a final rule, even though efforts may be continuing to develop such products. Thus, to avoid a situation where the final rule cannot, as a practicable matter, be complied with in relation to the use of interior barrier materials for Type II upholstered furniture, and to avoid an unintended devastating impact on DFA members (and other companies) the DFA suggests that any final rule provide that: **Prior to the Effective Date, the CPSC staff shall determine that compliant barrier materials are commercially available, and if they are not, the CPSC will have the ability to extend the Effective Date to such time as such materials are available.**

3. The DFA is aware of continued efforts by industry and the CPSC staff to establish appropriate testing protocols for technical and cost effectiveness purposes. In particular, the DFA is aware of the CPSC staff's efforts to develop appropriate testing using Reduced Ignition Propensity (RIP) cigarettes. **The DFA encourages the staff to continue its efforts to ensure that all testing and related requirements, whether for purposes of Type I or Type II upholstered furniture, continue.** It is imperative that before a final rule is adopted, and certainly before one becomes effective, all such testing and other requirements must be determined to be technically efficacious and cost justified.

The DFA appreciates the opportunity to submit these comments and for the Commission's consideration of them. Thank you.

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James F. Hoebel
13506 Star Flower Court
Chantilly, Virginia 20151
May 19, 2008

Office of the Secretary
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Subject: Upholstered Furniture NPR

Thank you for the opportunity to submit comments on the publication of 16 CFR 1634, the Commission's proposed rule covering upholstered furniture, dated March 4, 2008. This subject has been important to me for many more years than I care to count.

Since the Commission has been working on this subject, particularly since the National Association of State Fire Marshals submitted their petition, the CPSC has considered a dizzying array of alternative regulatory alternatives of varying merit. From someone now on the outside, it seems like the agency is now, like a lightning bolt, seeking the path of least resistance. But this is, of course, not necessarily the right path.

This most recent option is very disappointing. This proposal focuses only on part of the problem – curiously the smoldering ignition of upholstery fabrics. Curious because smoldering ignition is known to be primarily controlled by the relative performance of the furniture's filling material while open flame ignition is primarily controlled by the performance of the covering fabric.

Perhaps this has been chosen because smoldering tests of certain furniture fabrics seem to have a secondary benefit of reduced propensity to ignite furniture composites. However, one must resist designing a standard based on the materials and constructions being used for today's production. Materials and constructions will surely change in the future. With the CPSC proposal, there will be no protection from the introduction into the market of highly cigarette-ignitable filling materials OR highly open-flame ignitable upholstery fabrics. I fear that such a standard would have a negative effect on fire safety in the long run. (At least, we now have the UFAC Voluntary Action Program to address smoldering ignition of filling materials, but that would surely go away if the CPSC promulgated the proposed standard.)

I believe that CPSC must address directly both the open flame and smoldering problems by promulgating a standard that includes, as a minimum, a requirement for upholstery fabrics that resist open flame ignition and a requirement for filling material that resist smoldering ignition. Composite (mock-up) tests are preferred to component tests. While

several potentially effective regulatory choices exist (at least in draft), such as the very good small open flame test developed by the CPSC laboratory described in the October 1997 briefing package and the smoldering tests contained in the UFAC Voluntary Action Program, the draft standard known as "Cal 117 Plus" would be an excellent starting place for the new standard and could be proposed easily.

Finally, I would draw your attention to the honest, thoughtful, and passionate comments submitted by the National Association of State Fire Marshals and Gordon Damant. These are valid comments, provided by recognized technical experts from the consumers' point of view. Consumers are your primary constituency.

Please take the first purpose of the Consumer Product Safety Act to heart. And, do the right thing.

Sincerely,

James F. Hoebel

Stevenson, Todd

From: JAMES HOEBEL [jfhoebel@verizon.net]
Sent: Monday, May 19, 2008 3:52 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: CPSCUphFurnMay2008.doc

Ladies and Gentlemen,

Attached are comments to the subject document, relating to 16 CFR 1634, proposed rule covering upholstered furniture.

Thank you for the opportunity to submit these comments,

Sincerely,

James F. Hoebel

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Stevenson, Todd

From: Schedler, Sara [SSchedler@foe.org]
Sent: Monday, May 19, 2008 3:44 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: CPSC comments.doc

May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

Friends of the Earth and the following organizations applaud the excellent work of the Consumer Product Safety Commission in developing the Proposed Rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634). We strongly support a smoldering ignition performance standard for fabrics and other upholstery cover materials and urge you to move forward with implementation of this standard. The adoption of this standard will not only result in superior fire safety for consumers, but will also discourage the use of halogenated fire retardant chemicals (FRs) in furniture filling materials, which have been associated with serious health impacts to humans, wildlife, and the environment.

The Proposed Rule represents a much more constructive, viable, and environmentally-preferable approach to increased fire safety than the 2005 Draft Standard, which would have encouraged the use of extremely high amounts of halogenated fire retardants in the nation's furniture. According to the Polyurethane Foam Association, which produces the foam for the nation's furniture manufacturers, 17 to 70 million additional pounds of these chemicals would have been used annually to meet the 2005 draft standard.

The Commission is to be commended for recognizing the dangers of halogenated fire retardants and adopting the revised version of the regulation.

However, Friends of the Earth remains concerned that despite this regulation, halogenated fire retardant chemicals may nonetheless be used in furniture products. We have discovered that a number of furniture makers are uncertain whether their foam contains FRs, and in some cases, have believed their polyurethane foam fillings to be free of FRs when in fact, tests using an X-Ray Fluorescence analyzer reveal that they do contain FRs.

We also are concerned that a minority of manufacturers may choose to apply halogenated FRs to backcoat upholstery fabric to meet the smoldering ignition performance standard in this draft standard. Especially given the concerns that Commissioner Thomas Moore raised in regards to fire retardant chemicals in his statement "On the Regulatory Alternatives to Address the Flammability of Upholstered Furniture," issued December 27, 2007, we urge you to undertake further measures to alert and safeguard

consumers from exposure to these chemicals, and request that CPSC make every effort to further discourage such use.

We also request that you require manufacturers who choose to use fire retardant chemicals to alert the CPSC to such use, and to specify the exact chemical configurations that will be employed. In this way, the CPSC can develop an extensive database for future analysis, which will be extremely useful should any of these chemicals be proven to cause significant harm.

Finally, we urge you to require labeling when consumers may be exposed to halogenated fire retardant chemicals from furniture products, including all infant and children's furniture products that are subject to this rule. By doing so, consumers who are concerned about exposure risks will have the opportunity to purchase products that are free of fire retardant chemicals.

The following points address our specific concerns over fire retardant use in furniture, including many children's products, today. Please see our attachments for scientific studies in support of these comments:

1. Persistent, Bioaccumulative, Toxic
Halogenated fire retardants used in furniture and children's furnishings have been found to persist, accumulate and be potentially toxic. Halogenated fire retardant chemicals are accumulating in humans, wildlife, and the environment at alarming rates. U.S. women have some of the highest levels of fire retardants in their breast milk in the world, and babies have the highest levels of human exposure.

2. Failure to Conduct Adequate Toxicity Testing
Adequate toxicity testing has not been conducted on the serious health effects of these fire retardant chemicals. Health effects include the potential for bioaccumulation and persistence, especially in children, as well as endocrine disruption, carcinogenicity, and reproductive and neurological disorders. Recent U.S. EPA studies indicate areas of concern, as well as large data gaps for human health and environmental safety for all of the fire retardant chemicals currently used in furniture and many children's products.

3. Links to Health Disorders
Dozens of scientific studies are now underway examining the relationship between previously used PBDE fire retardant chemicals and birth defects, autism, hyperactivity, reduced fertility including lowered sperm counts, and other reproductive and neurological conditions. In August of 2007, a study conducted by U.S. EPA scientists linked fire retardant chemicals to the current epidemic of hyperthyroid disease in domestic cats.

4. Environmental Fate and Transport
There is lack of adequate data on the fate and transport of fire retardant chemicals used in furniture. Alarmingly, some fire retardants such as PBDEs and PCBs have been found in extremely remote areas including the Arctic Circle, with the highest levels found in Killer Whales. The entire lifecycle of products containing fire retardant chemicals must be considered including occupational exposure during manufacture, chemical exposure during use, and end of life disposal problems when products are combusted, land-filled, composted, littered, or recycled.

5. Failure to Reduce Fire Mortalities
There is lack of adequate evidence that chemical fire retardants lead to a reduction in fire deaths. Even though California is the only state in the country with flammability standards for furniture and children's products such as cribs, infant carriers, etc. (California Technical Bulletin 117), leading to the use of millions of pounds of chemical fire retardants in these products every year, California has failed

to achieve greater fire safety than other states. According to a study by the National Fire Protection Association, the rate of reduction of fire deaths in California over the last 20 years is statistically similar to other states that do not have furniture flammability standards. A general decrease in smoking, the increased use of sprinkler systems and smoke alarms, fire-safe cigarettes, and improved building codes have had a significant impact on increasing fire safety across the U.S. The proposed regulation will further add to federal fire safety.

6. Failure to Regulate TDCP Illustrates Dangers of Additional Halogen Exposures
A fire retardant known as chlorinated tris, or TDCP was removed from children's sleepwear 30 years ago by CPSC, but according to some sources, it is currently the second most common fire retardant used in California furniture. Tris is both a mutagen and a probable human carcinogen. If tris were used in all furniture across the U.S., CPSC predicts up to 300 additional cases of cancer per million from human exposure or up to 1,200 cases of cancer annually in the U.S.

7. Dangers to Firefighters and Emergency Personnel
When furniture treated with fire retardant chemicals burns, dioxins and furans -- among the most potent carcinogens known -- are produced. According to a recent study published in the Journal of Occupational and Environmental Medicine, firefighters have significantly elevated rates of four types of cancer: multiple myeloma, non-Hodgkin's lymphoma, prostate, and testicular cancer. These cancers are thought to be related to firefighters' exposure to the toxic by-products of combustion, especially dioxins and furans. When furniture treated with fire retardant chemicals burns, relatively large amounts of these toxins are produced. Many fire fighting organizations, including the International Association of Firefighters, which represents hundreds of thousands of firefighters nationwide, support reducing potentially toxic fire retardant chemicals in consumer products and the environment.

8. California Considering Phase-Out of Halogenated Fire Retardants
California is currently considering legislation in the Senate mandating the phase-out of the most toxic fire retardant chemicals (AB 706). A new study finds private residences in California have from 3-10 times higher levels of fire retardant chemicals than homes elsewhere in the U.S. For this and other reasons, California Assemblymember Mark Leno has introduced a bill, AB706, to ban halogenated flame retardants from use. AB 706 has the strong support of national environmental and public health organizations, burn institutes, organized labor organizations, as well as the largest firefighter organizations in California.

9. Reduced Ignition Propensity (RIP) Cigarettes Will Reduce Fire Deaths
Public health officials acknowledge that reduced ignition propensity (RIP) cigarettes offer a much safer and more effective means of reducing fire hazards than using fire retardant chemicals. Laws in 22 U.S. states and Canada currently require cigarettes to be constructed so that they will self-extinguish if left unattended. Early estimates from New York State suggest that RIP cigarettes will cause a 50 to 67 percent reduction in fire deaths. On October 25, 2007, Reynolds American Inc. announced a product-wide transition to RIP cigarettes. Fire scientists predict RIP cigarettes will be universal in the US within two years.

We applaud your efforts to improve fire safety, and urge you to enact the "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634). We appreciate the Commission's support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of human and environmental health when less toxic, fire-safe alternatives already exist.

Thank you.

Sincerely,

Russell H. Long, Ph.D.
Vice President
Friends of the Earth

Ellen Bloom
Assistant Director
Consumer's Union

Rachel Weintraub
Director of Product Safety and Senior Counsel
Consumer Federation of America

Ed Mierzwinski
Consumer Program Director
U.S. Public Interest Research Group (U.S. PIRG)

Bill Couzens
Founder/President
Next Generation Choices Foundation/Lesscancer.org

Kathleen A. Curtis
Policy Director
Clean New York, a project of Women's Voices for the Earth

Christopher Gavigan
CEO/Founder
Healthy Child Healthy World

David Siddiqui
Sustainability Consultant
Green Evolution

Alexander Binik
Executive Director
DE-Toxics Institute

Pamela Miller
Executive Director
Alaska Community Action on Toxics

Sara Schedler
Campaign Associate
Friends of the Earth
311 California St., Suite 510
San Francisco, CA 94104
415.544.0790, ext. 17 (office)
415.544.0796 (fax)
www.foe.org
www.bluewaternetwork.org

May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

Friends of the Earth and the following organizations applaud the excellent work of the Consumer Product Safety Commission in developing the Proposed Rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634). We strongly support a smoldering ignition performance standard for fabrics and other upholstery cover materials and urge you to move forward with implementation of this standard. The adoption of this standard will not only result in superior fire safety for consumers, but will also discourage the use of halogenated fire retardant chemicals (FRs) in furniture filling materials, which have been associated with serious health impacts to humans, wildlife, and the environment.

The Proposed Rule represents a much more constructive, viable, and environmentally-preferable approach to increased fire safety than the 2005 Draft Standard, which would have encouraged the use of extremely high amounts of halogenated fire retardants in the nation's furniture. According to the Polyurethane Foam Association, which produces the foam for the nation's furniture manufacturers, 17 to 70 million additional pounds of these chemicals would have been used annually to meet the 2005 draft standard.

The Commission is to be commended for recognizing the dangers of halogenated fire retardants and adopting the revised version of the regulation.

However, Friends of the Earth remains concerned that despite this regulation, halogenated fire retardant chemicals may nonetheless be used in furniture products. We have discovered that a number of furniture makers are uncertain whether their foam contains FRs, and in some cases, have believed their polyurethane foam fillings to be free of FRs when in fact, tests using an X-Ray Fluorescence analyzer reveal that they do contain FRs.

We also are concerned that a minority of manufacturers may choose to apply halogenated FRs to backcoat upholstery fabric to meet the smoldering ignition performance standard in this draft standard. Especially given the concerns that Commissioner Thomas Moore raised in regards to fire retardant chemicals in his statement "On the Regulatory Alternatives to Address the Flammability of Upholstered Furniture," issued December 27, 2007, we urge you to undertake further measures to alert

and safeguard consumers from exposure to these chemicals, and request that CPSC make every effort to further discourage such use.

We also request that you require manufacturers who choose to use fire retardant chemicals to alert the CPSC to such use, and to specify the exact chemical configurations that will be employed. In this way, the CPSC can develop an extensive database for future analysis, which will be extremely useful should any of these chemicals be proven to cause significant harm.

Finally, we urge you to require labeling when consumers may be exposed to halogenated fire retardant chemicals from furniture products, including all infant and children's furniture products that are subject to this rule. By doing so, consumers who are concerned about exposure risks will have the opportunity to purchase products that are free of fire retardant chemicals.

The following points address our specific concerns over fire retardant use in furniture, including many children's products, today. Please see our attachments for scientific studies in support of these comments:

1. Persistent, Bioaccumulative, Toxic
Halogenated fire retardants used in furniture and children's furnishings have been found to persist, accumulate and be potentially toxic. Halogenated fire retardant chemicals are accumulating in humans, wildlife, and the environment at alarming rates. U.S. women have some of the highest levels of fire retardants in their breast milk in the world, and babies have the highest levels of human exposure.

2. Failure to Conduct Adequate Toxicity Testing
Adequate toxicity testing has not been conducted on the serious health effects of these fire retardant chemicals. Health effects include the potential for bioaccumulation and persistence, especially in children, as well as endocrine disruption, carcinogenicity, and reproductive and neurological disorders. Recent U.S. EPA studies indicate areas of concern, as well as large data gaps for human health and environmental safety for all of the fire retardant chemicals currently used in furniture and many children's products.

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Thank you.

Sincerely,

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Christopher Gavigan
CEO/Founder
Healthy Child Healthy World

David Siddiqui
Sustainability Consultant
Green Evolution

Alexander Binik
Executive Director
DE-Toxics Institute

Pamela Miller
Executive Director
Alaska Community Action on Toxics

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Stevenson, Todd

From: George Booth` [george.booth@springscreative.com]
Sent: Monday, May 19, 2008 3:53 PM
To: CPSC-OS
Subject: FW: Comment on Proposed Rule Concerning Upholstered Furniture Flammability
Attachments: 80512 - Comment on Proposed Furniture Flammability Rule.doc

Best regards,
-Geo.

George E. Booth
Product Manager
Firegard® Brand Products
Springs Creative Products Group, LLC
220 W. White Street
Rock Hill, SC 29730

Phone: 803.324.6513
Fax: 803.324.6950
Toll-free: 800.533.6522

Email: george.booth@springscreative.com

www.firegard.com

-----Original Message-----
From: George Booth` [mailto:george.booth@springscreative.com]
Sent: Monday, May 19, 2008 3:46 PM
To: 'os@cpsc.gov'
Subject: Comment on Proposed Rule Concerning Upholstered Furniture Flammability

The attached document contains my comments and observations regarding the proposed rule concerning upholstered furniture flammability. These comments are my own and do not necessarily represent those of my employer.

I welcome any questions.

Best regards,
-Geo.

George E. Booth
Product Manager
Firegard® Brand Products
Springs Creative Products Group, LLC
220 W. White Street
Rock Hill, SC 29730

Phone: 803.324.6513
Fax: 803.324.6950
Toll-free: 800.533.6522

Email: george.booth@springscreative.com

www.firegard.com

Comment on Proposed Furniture Flammability Rule

Disclosure – I am the holder of a Master of Science degree in Textile Technology, and I work as Product Manager for a manufacturer and marketer of open flame barrier fabrics that are principally sold into the mattress industry. I have over ten years' experience dealing with compliance to open-flame regulations.

While it is true that my company stands to benefit from the implementation of the proposed rule, I offer the following comments on my own behalf in the belief that the proposed rule can be amended to better address the fire hazards of upholstered furniture.

Introduction -- In considering the proposed rule, and in discussions in various mattress and upholstered furniture industry forums, I have decided that there are functional, procedural and logical problems with the proposed rule. These problems will make the proposed rule little more than eyewash, with the result being little to no improvement in consumer safety. For brevity's sake, I have created bullet lists instead of paragraphs. I would be happy to elaborate on any of these points at the Commission's pleasure.

Functional and Procedural Problems:

- There are qualitative differences between smoldering and open-flame ignition sources, and resistance to the former does not guarantee resistance to the latter.

- Categorical differences in compliance methods for each ignition source
    - Proposed rule implies that smoldering resistance makes open-flame resistance unnecessary.
- Uncertainty regarding foreseeable fire scenario
    - What real-world analogue is proposed ignition source intended to simulate?
        - Is this analogue representative of incidence statistics?
- A component test is posited as the solution for ensuring the safety of composite structures.
    - This ignores the body of knowledge that identifies synergies between and among cover materials and cushioning materials of varying compositions.
        - If performance could be predicted on the burning behavior of components alone, why have full-scale tests?
- Industry resistance may hinder a meaningful rule
    - UFAC – Voluntary standard seen as adequate
    - Not materially different in re: smoldering emphasis

        - If the voluntary UFAC standard hasn't obviated a federal regulation, why would CPSC offer substantially the same remedy?

        - What effect has UFAC standard had on furniture fires?

- Component basis for testing shifts liability for furniture's compliance to providers of fabrics and upholstery cushioning materials, not furniture manufacturers. As a result, fabric suppliers could:

    - Refuse to accept liability for furniture open-flame performance by withdrawing from that market or

    - Increase prices to industry to compensate for higher liability insurance premiums

- Textile companies could find themselves targeted by plaintiffs' attorneys for deaths and injuries resulting from upholstered furniture fires over which they wield no influence.

    - e.g., a Type I smolder-resistant article ignited by open flame

Logical problems

- The proposed rule is inconsistent with the logic undergirding the creation and implementation of 16 CFR 1633 for mattresses.

- As the Commission knows, 16 CFR 1632, the smoldering ignition resistance standard for mattresses has been in place for over 30 years.

- Clearly, the Commission regarded this standard as inadequate to address the hazard posed by open-flame resistance, implementing 16 CFR 1632 in July 2007.

- Given the material similarities between mattresses and upholstered furniture – to wit, each form comprises cushioning materials within a fabric covering – is it logically consistent to permit the upholstered furniture industry to trail the mattress industry by 30 years?
    - The mattress standard is a full-scale composite test,
        - Shouldn't some attempt at a full-scale composite test be made for upholstered furniture as well?
    - Furniture industry trade groups say it is too difficult to account for the various shapes, sizes and cover fabrics to make a full-scale requirement feasible. They also cite the significant percentage of the trade using fabric provided by the consumer (COM - customer's own materials).

        - This is a substantive objection that has no correspondence in the mattress industry
        - The creation of an exception for COM's is possible
            - Comparable to the refurbishing exception for consumers' own mattresses.
    - I propose changes in the next section of this document.
- The Commission could risk having 1633 overturned in court since the proposed rule could be seen as arbitrary, making 1633 look punitive by comparison

Suggested Amendments or Alternatives to Proposed Rule

- Insist on resistance to open-flame as well as smoldering ignition sources
- Use European Union CBUF study as template/launch pad
    - Create predictive models for varying combinations of fabrics (leather, upholstery & filler cloth), fibers and foams
        - Account for varying weights and densities
        - Account for varying furniture sizes and shapes+
        - Models could be resident on a CPSC website created for this purpose
- Establish multiple levels of compliance with labeling/hang tag requirement.
    - Level 4: Components (Outer covering, barrier material, and cushioning) tested individually by respective manufacturers for smoldering and flame ignition resistance, shipped with COA and evaluated in predictive model by furniture mfr/importer
        - Similar to Type I of proposed rule
        - Computer models/simulates composite behavior of combined components.
        - Mfr/importer to retain copy of model output
    - Level 3: Certified Level 4 components tested as a composite in a cone calorimeter.
        - Results compared to predicted outcome.
    - Level 2: Certified Level 4 components tested in furniture mock-up (a la CTB 133) in a room calorimeter
        - Alternative to Level 3 approach.
        - Composite results compared to predicted outcome

- Level 1: Actual article tested in room calorimeter
  - Establish Peak Heat Release Rate, Total Heat Release Rate and/or mass loss criteria
    - Establish separate pass/fail thresholds for chairs, love seats, sofas, etc.

- Allow furniture makers to choose the level and label accordingly.
  - Keep records commensurate with certification level and testing
  - Higher costs of compliance can be passed along at wholesale & retail
  - Consumers can choose level of compliance and price that suits their comfort level and budget
  - Insurance industry can offer incentives
  - High-occupancy/public accommodations could be required to meet Level 1

Conclusion

- The proposed rule is the wrong approach – the mismatch between threats and solutions is analogous to bringing a knife to a gunfight
- The rule is inconsistent with CPSC's recent mattress regulation
- Could inadvertently undermine mattress safety
- Likely will not increase safety of upholstered furniture
- Better approaches that take the open-flame threat into account are possible

Respecfully Submitted,

George E. Booth
4319 Deer Run
Rock Hill, SC 29732

Tel: 803/817-7919
Email: firegard@gmail.com

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NATIONAL ASSOCIATION OF STATE FIRE MARSHALS

May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Subject: Upholstered Furniture NPR

To the Commission:

This represents the second submission by the National Association of State Fire Marshals (NASFM) to the US Consumer Product Safety Commission (CPSC) on its proposed rule, "Standard for the Flammability of Residential Upholstered Furniture." This submission intends to further convey NASFM's concerns about the potential impact and motivations behind the proposed regulation, and to encourage the CPSC to take a more comprehensive approach to regulating upholstered furniture flammability.

Demonstration of Small Open Flame Ignition

In an effort to explore and illustrate the validity of our concerns, NASFM conducted a demonstration of a small open flame ignition of an upholstered chair on April 15, 2008, at the New Hampshire Fire Academy in Concord, NH. A DVD of these efforts accompanies this letter.

The upholstered chair used in this demonstration was purchased on-line from Macy's (www.macys.com) and delivered to the office of J. William Degnan, New Hampshire State Fire Marshal (Marshal Degnan is the Chairman of NASFM's Consumer Product Fire Safety Task Force and a member of the NASFM Board of Directors). The chair was a Chloe High-Leg Country Style Recliner upholstered in a polyester microfiber fabric. The page from the Macy's website featuring the chair is attached to this letter. A Macy's representative confirmed over the telephone that the chair was manufactured by Lane and that it was compliant with UFAC smoldering ignition guidelines. A label attached to the chair indicated that it was manufactured to comply with California Technical Bulletin 117 (TB 117). However, no testing was performed by NASFM to verify compliance with TB 117 or with UFAC, so it is unknown if any or all of the components complied.

To provide a quick confirmation that the chair was not highly smolder-prone, NASFM placed two different cigarettes (one was a reduced ignition propensity Marlboro cigarette purchased in New York, and the other was a conventional, non-reduced ignition propensity cigarette purchased in Virginia), one after the other, in the rear crevice of the chair and let them burn for about 5 minutes each, at which time they were removed from the chair with no evidence of ignition having occurred. These demonstrations are depicted at the beginning of the attached DVD. While not conducting a scientific test of smoldering resistance, and providing no representations about whether the chair would pass such a test, NASFM observed that the polyester microfiber fabric covering the chair performed in the way that would be expected when exposed to burning cigarettes.

Having been assured that this was not a highly smolder-prone chair, NASFM next lit a small wooden match and placed it along the rear crevice of the chair (in a different area from where the cigarettes had been placed). The chair ignited in approximately 12 seconds, and the fire grew rapidly.

The portion of the DVD containing the small open flame demonstration includes audio commentary from Marshal Degnan, who observes that, although this upholstered chair was in isolation, a chair in a residence would have other combustible items around it that would quickly become involved in the fire. He notes that a smoke alarm located in a common area of a residence might sound after the chair had been burning for about 2½ minutes. Marshal Degnan indicates that if this fire had taken place in a residence, room flashover would likely occur between 3 and 4 minutes from the time of ignition.

Marshal Degnan also says that if occupants had been alerted by the smoke alarm and called 911, the fire department would not even be on the scene at the time that flashover was likely to occur. Depending on circumstances, it might be between 5 and 10 minutes after receiving the alarm before the fire department arrived at the scene. Marshal Degnan stresses that any occupants who had not escaped on their own would be lost by the time flashover occurred.

Discussion of Implications of CPSC's Proposed Rule

This simple, one-time demonstration of a single upholstered chair showing gross vulnerability to a small open flame is cause for deep alarm.

NASFM is greatly concerned that the relatively recent pervasiveness of polyester microfiber cover fabrics in mid- and lower-end upholstered furniture signals a dangerous increase in the vulnerability of upholstered furniture to small open flame ignitions. Several other plastic-based fabrics that are used extensively on residential furniture, such as fabrics made from polypropylene (olefin) and blends of polypropylene and acrylic fibers, have been shown to resist cigarette ignition but are extremely susceptible to

ignition by a small open flame. The polyester microfiber cover material in the chair that was burned by NASFM, when ignited, overpowered any protection the filling material in this chair may have had based on compliance with TB 117. Polyester microfiber fabrics had not been invented and certainly were not used as upholstery coverings when TB 117 was developed over 3 decades ago.

NASFM fears that, by not requiring any flammability requirements or protection for highly flammable filling materials in all but a small percentage of cases, and by proposing a smoldering ignition standard that essentially encourages the use of fabrics such as polyester microfiber and other plastic-based fabrics, the CPSC will inadvertently increase the number and severity of fires ignited by small open flame.

Upholstered furniture covered with fabrics that are extremely prone to small open flame ignitions absolutely and without question require protection for the filling materials directly underneath, to prevent or slow their ignition and allow occupants time to detect and escape from the fire. The CPSC's proposed regulation must acknowledge and prevent against this hazard.

The recent "agreement in principle" to a $30 million settlement by several manufacturers of polyurethane foam, whose unprotected products were used as soundproofing in the tragic Station nightclub fire in Rhode Island that killed more than 100 people in February 2003 (article attached), is evidence that the manufacturers themselves admit the hazard represented by their products. The recent sponsorship by the American Home Furnishings Alliance and the National Home Furnishings Association of a change in the model International Fire Code to require fire sprinklers in commercial occupancies used for the display and sale of upholstered furniture (attached), is yet another signal that this industry is ready to acknowledge and confront the flammability of their products in a serious way.

The CPSC does the furniture industry no favors by requiring so little of them, and in fact could expose them to a great deal of liability if this regulation were to become final as proposed. The industry will not find refuge in compliance with the proposed smoldering ignition standard when faced with litigation involving small open flame fires that may even increase in incidence and severity as a result of such compliance. Meanwhile, consumers – the constituents the CPSC was established to protect – would be the biggest losers of all.

In Acting Chairman Nancy Nord's April 30 appearance before the Senate Appropriation's Financial Services and General Government Subcommittee, she reportedly talked about how third-party certification would add a "layer of protection" to

efforts to ensure the safety of imported products.[1] We are heartened that the CPSC recognizes and invokes the strategy of "safety layering" when it comes to preventing unsafe imports from entering the country. We strongly suggest that the CPSC adopt the same strategy when addressing the fire safety of the products under its jurisdiction, like upholstered furniture. Safety layering in the case of upholstered furniture means not only protecting against smoldering ignition, but also protecting against small open flame ignitions. It means not only protecting against ignition of the covering materials, but also of the flammable filling materials underneath. It means not only trying to prevent ignition, but putting safeguards in place to slow the propagation of the fire should ignition take place. NASFM has long advocated "layers of protection" when it comes to fire safety.

The technology has long existed to address the hazard of flammable upholstered furniture, and, as you know, new technologies have been and are being developed to make furniture safer – without the use of chemicals that have been targeted as bad actors. The CPSC does not need to dumb down its standards to appease industry. The fact that NASFM purchased an upholstered chair from a reputable retailer that was made by a reputable manufacturer, exposed it to a small open flame from a lit match and saw it ignite in 12 seconds, on its way to being totally consumed by a raging fire in a matter of minutes, means that something is wrong with the way furniture is being made today. Your currently proposed standard will not improve this situation, and has the real potential to make it worse. We appeal to your sense of duty to consumers to raise the standard for upholstered furniture flammability to a level that will truly protect against the actual and real hazards faced by consumers. As it has done in the case of mattresses and many other products, industry no doubt will rise to the occasion and exceed your expectations.

Sincerely,

John C. Dean
President

Attachments

[1] "Certification Most Needed For Imports, Nord Tells Senate," Product Safety Letter, Vol. 37, No. 18, May 5, 2008, Oberle Communications LLC.

furniture

SALE & CLOSEOUT

ROOM
- Living Room
- Bedroom
- Dining Room & Kitchen
- Kids Room
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CATEGORY
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- Bedroom Collections
- **Chairs & Recliners**
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- Recliners
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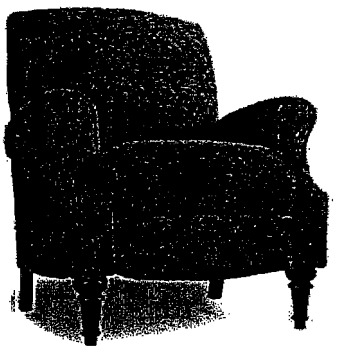

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In an attractive country-style design, this high-leg recliner brings intricate details and exceptional comfort into the living room. Available in four distinct colors of multi-red, almond, black and sage.

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Chloe High-Leg Country Style Recliner, May 2, 2008
By ShopForMyFamily from Gardnerville, NV (read all my reviews)

"Quality construction.
Very comfortable for reading or enjoying the company of family and friends."

How often do you shop at macys.com?: Frequently

US foam makers settle in deadly Rhode Island fire

Mon May 12, 2008 6:46pm EDT

BOSTON, May 12 (Reuters) - Several makers of foam used as soundproofing have agreed in principle to pay $30 million to victims of a Rhode Island nightclub fire that killed more than 100 people, the latest in a string of settlements that total more than $100 million.

Court papers filed on Monday showed Carthage, Missouri-based Leggett & Platt Inc. (LEG.N: Quote, Profile, Research) and three other defendants reached agreement with plaintiffs representing those killed and injured in one of the deadliest blazes in U.S. history.

"We're still some time off in actual resolution of this case but certainly this is another step," Steven Minicucci, an attorney who represents more than a dozen of the approximately 300 plaintiffs, told Reuters.

The fire, sparked by fireworks that accompanied a show by the rock band Great White on Feb. 20, 2003, at The Station nightclub in West Warwick, also injured more than 200 people.

The sparks spread to flammable, polyurethane foam on the club's walls that had been used for soundproofing. Nearly a third of the crowd at the heavy metal rock show were unable to exit the building.

The settlement, filed in U.S. District Court in Rhode Island, must be approved by the judge. Other defendants are privately held U.S. foam makers Wm. T. Burnett & Co, General Foam Corp and FFNC Corp.

The club's owners, brothers Jeffrey and Michael Derderian, have said they did not know the foam was flammable. Investigators said the foam fueled the fire.

The Derderians pleaded no contest to 100 counts of involuntary manslaughter. Michael Derderian is serving a four-year sentence. His brother served no jail time. Former Great White tour manager Daniel Biechele served 22 months in prison after pleading guilty to the same charges.

More than two dozen defendants remain -- including the state of Rhode Island and the beer manufacturer Anheuser Busch Inc. (BUD.N: Quote, Profile, Research), Minicucci said.

Clear Channel Broadcasting Inc., the largest U.S. radio station owner, settled for $22 million in February. The Clear Channel Communications Inc. (CCU.N: Quote, Profile, Research) subsidiary was named in lawsuits because it owns WHJY-FM, a local radio station that promoted the concert.

(Reporting by Jason Szep; Editing by Cynthia Osterman)

F135–07/08
903.2.6 (IBC [F] 903.2.6)

Proponent: Jesse J. Beitel, Hughes Associates, Inc., representing American Home Furnishings Alliance and National Home Furnishings Association

Revise as follows:

903.2.6 (IBC [F] 903.2.6) Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 12,000 square feet (1115 m^2);
2. Where a Group M fire area is located more than three stories above grade plane; ~~or~~
3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2)~~.~~ ; or
4. Where a Group M occupancy is used primarily for the display and sale of upholstered furniture.

Reason: This proposal is submitted jointly by the American Home Furnishings Alliance (AHFA) and the National Home Furnishings Association (NHFA) in the interest of making furniture retail and warehouse facilities safer for employees, customers and first responders. AHFA represents manufacturers and importers of residential furniture, some of whom also operate branded retail stores. NHFA's membership comprises 2,800 corporate entities representing 10,000 retail furniture stores in all 50 states and several foreign countries.

The proposal to require sprinklers for Group M occupancies containing significant amounts of upholstered furniture recognizes that, under certain circumstances, all upholstered furniture will ignite and contribute to the fuel load of a fire. There is no such thing as totally fire safe upholstered furniture.

The AFHA and the NHFA have examined proposals for exempting vendors of certain constructions of furniture and concluded that such exemptions would be impractical for local code officials to enforce. This is the case because the internal construction of furniture cannot be established reliably without deconstructing it.

Further, materials and constructions touted as more fire resistant have not proven so to the satisfaction of fire authorities. The U.S. Consumer Product Safety Commission (CPSC) has tested furniture with combustion modified polyurethane foam such as that required in California and the United Kingdom and found that such foam does not meaningfully improve fire performance when furniture is exposed to an open flame. Other researchers have found that constructions employing the fire-blocking barriers now prevalent in mattresses do not reliably slow the progression of furniture fires. This is likely due to the variety of upholstery fabrics and seating geometries typical of furniture as compared to mattresses.

The most protective code measure would establish uniform, easily enforceable sprinkler requirements and not base safety considerations on differences in furniture construction that may or may not exhibit better fire performance in a retail setting.

Cost Impact: The code change proposal will increase the cost of construction.

Public Hearing: Committee: AS AM D
Assembly: ASF AMF DF

F135-07/08

Committee Action: **Approved as Modified**

Modify the proposal as follows:

903.2.6 (IBC [F] 903.2.6) Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 12,000 square feet (1115 m^2);
2. Where a Group M fire area is located more than three stories above grade plane;
3. Where the combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 24,000 square feet (2230 m^2) ; or
4. Where a Group M occupancy is used ~~primarily~~ for the display and sale of upholstered furniture.

Committee Reason: The proposal was approved because the committee felt that it is a good first step supported by the furniture industry in attempting to deal with the hazards presented by upholstered furniture. The committee indicated its sense that future efforts on the topic need to address Group F and S upholstered furniture occupancies as well and that a reasonable sprinkler threshold needs to be added to provide some relief to the small businesses that will now be affected. The modification removes a subjective term that the committee felt could create serious enforcement inconsistencies.

Assembly Action: **None**

The Govmark Organization, Inc.
96 Allen Boulevard, Suite D – Farmingdale, NY 11735-5626 – U.S.A.
Tel.: +1 631 293 8944 Fax: +1 631 293 8956
Testing Division: *info@govmark.com*
Equipment Division: *equipment@govmark.com*
Website: www.govmark.com

May 19, 2008
SMC 6231

Consumer Product Safety Commission
Washington, DC 20207
Email: cpsc-os@cpsc.gov

Subject: 16 CFR 1634 Proposal

Gentlemen:

In our opinion we think that the CPSC document should address the issue of upholstered furniture flammability by specifying for all upholstered furniture cigarette ignition resistance and open flame resistance.

The current document appears to be overly complicated in the number of test specimens required. We would suggest that the CPSC adopt the UFAC Fabric Classification Test, which is based on testing 3 specimens. I believe that this standard has been in effect since the mid 1970s when the CPSC announced its proposed rulemaking at that time. Over the years Govmark has performed thousands of the UFAC Fabric Classification Tests and it appears to be quite adequate to differentiate between smoldering and non-smoldering upholstery fabrics.

There is some talk that a cigarette ignition resistance test might be obviated by the states, which have mandated self-extinguishing cigarettes.

Govmark never endorsed the test procedure that categorized a self-extinguishing cigarette.

In our laboratory we have taken cigarettes from a state that requires self-extinguishing cigarettes, i.e. New York State, and have used them in an upholstered furniture mockup configuration. We used two different cover cloths. Our results for this experiment are attached and are self-explanatory.

If we read your proposed regulation correctly, a manufacturer is mandated to use cigarette ignition resistant upholstery cover material; however, he has the option of using upholstery cover material that is not cigarette ignition resistant provided that he uses a barrier fabric which is resistant to both cigarette and open flame ignition.

Govmark suggests that the open flame test be mandated irrespective of the cigarette ignition resistance properties of the upholstery cover fabric. Ideally the flame source should be the same as California Technical Bulletin 133. However, the 240 mm flame applied for 70 seconds might be of sufficient severity to improve open flame ignition resistance of furniture.

Sincerely yours,

Mr. Salvatore Messina
Tel. Ext. 414

SM:jd
Encl. Cigarette Evaluation

5/19/08

Cigarette Evaluation

A NON Filtered 85 mm Cigarette purchased in New York State was tested using 2 different Fabrics, The Test setup was a small scale Furniture Mock up as detailed in the UFAC procedure.

Fabric Configurations Used:

1) CA 117 DII Cotton Velvet Weight: 10.4 ozs/
2) 100% Wool Plain Weave Weight: 8.9 ozs/yd^2

Cigarette:

Length: 85 mm
Diameter: 7.8 mm
Weight: 1.06 gms

Foam: Standard UFac Foam.

	Cotton Velvet	100% Wool
Distance Burned:	85 mm	52.5 mm
Time:	34:12	26:15
Distance Burned:	85 mm	85 mm
Time:	30.48	44:49
Distance Burned:	85 mm	85 mm
Time:	25:17	37:48

NJR

Stevenson, Todd

From: The Govmark Organization, Inc. [info@govmark.com]
Sent: Monday, May 19, 2008 4:05 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR - 16 CFR 1634 Proposal
Attachments: smc6231 CPSC.pdf

Please see attached.

Best regards,
Ms. Michele D'Ambruoso

The Govmark Organization, Inc.
96 Allen Boulevard, Suite D
Farmingdale, NY 11735-5626 U.S.A.
Tel. +1 631-293-8944
Fax +1 631-293-8956
Email: info@govmark.com
Website: www.govmark.com

Polyurethane Foam Association

9724 Kingston Pike, Suite 503
Knoxville, TN 37922
Telephone 865-690-4648
Fax 865-690-4649
E-mail rluedeka@pfa.org
www.pfa.org

May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Re: Standard for the Flammability of Residential Upholstered Furniture

Dear Sir or Madam:

The Polyurethane Foam Association (PFA) appreciates the opportunity to comment on the Consumer Product Safety Commission's (CPSC) proposed rule concerning flammability standards for residential upholstered furniture.[1] PFA is the national trade association for manufacturers of flexible polyurethane foam (FPF) and suppliers to the industry. For nearly thirty years, PFA has been educating consumers about FPF and providing facts on environmental, health and safety issues related to FPF to the membership of PFA, flexible polyurethane foam users and regulatory officials. PFA believes the focus of the proposed rule is properly placed on smoldering ignition risks, and not on a new small open flame standard, at this time. Though some questions about the proposed rule remain, PFA supports the rule, believes it is an excellent first step towards addressing upholstered furniture flammability, and encourages the Commission to adopt the rule in its current form.

General Comments

PFA views the proposed rule as an advance in consumer safety because of the establishment of performance requirements and certification and labeling requirements regarding the flammability of upholstered furniture. Further, we strongly believe that the CPSC was correct to focus the proposed rule on safety issues related to smoldering ignition. Smoldering ignition is the principal aspect of fire risk that needs to be addressed via CPSC regulation, since according to the Commission's own data, smoldering ignitions account for 90% of deaths and 65% of injuries in fires started in upholstered furniture. The proposed rule correctly addresses prevention of smoldering flammability risks through two options: (1) the smolder ignition resistant cover fabrics requirement; or (2) an alternative smolder resistant interior barrier standard. After reviewing the efficacy of the rule over time and developing additional test data from small open flame testing,

[1] 73 FR 11702.

the CPSC could consider addressing small open flame issues, if the need exists and scientific data supports a proposed standard. Doing so now, however, would be premature, given that the overwhelming amount of fire safety risk relates to smoldering and the lack of scientific data to support a reproducible small open flame test protocol.

The CPSC's own studies reveal that standards such as TB-117, BS 5852, and a recent five-second open flame test all resulted in either inconclusive results, or products that actually performed worse than those that did not meet the standards. Importantly, report data indicates that small open flame risks, and fire related deaths and injuries in general, are declining. This is due in part to Americans smoking less, and also to better fire safety protections, including widespread use of smoke and carbon monoxide detectors and new mandates for fire safe cigarettes. Small open flame risks have also been mitigated by the use of child-resistant lighters pursuant to 1993 CPSC regulations. PFA would also note that a proposed open flame standard would generate great controversy, which could preclude the finalization of any rule and leave consumers with no new fire safety protections.

The proposed rule recognizes the need for manufacturing flexibility and preserves upholstery material choices for consumers. The proposed standard permits manufacturers to either use materials that are sufficiently smolder resistant to meet a cigarette ignition performance test; or to incorporate fire barriers that meet smoldering and open flame resistance tests into the interior of the product. Including this flexibility in the proposed rule will minimize the reliance upon fire retardant chemicals in fabrics and filling materials to comply with the standard. Increasingly, new data is raising concerns over the safety and health impacts of certain fire retardant chemicals, and until more is known about them, prudence dictates a slowed approach to adopting requirements that will result in the wholesale use of such products.

The test specifications contained in the proposed rule call for Standard Polyurethane Foam (SPUF) with no fire retardant content. Chemical analyses performed by CPSC staff have indicated that products manufactured and sold to meet the specifications for SPUF described in Section 1623.24(b)(4) may contain trace amounts of various fire retardants, even when none are used in the manufacturing process. It may be very difficult to obtain foam for use as SPUF that is completely devoid of detectable fire retardant elements and compounds. Detection of trace amounts may be possible for many reasons, including but not limited to, methods used in post production chemical analysis and the use of chemical raw materials that may contain elements also found in many fire retardant additives. We believe that very small or trace amounts of fire retardant content should not significantly affect the performance of the SPUF used in the test procedures described in Sections 1634.4 through 1634.6.

Concerns and Questions

The proposed rule is a significant advancement in fire safety, yet PFA does foresee some issues that may need to be considered. PFA is concerned that the protocol has not been adequately investigated. Therefore, PFA poses the following questions:

1.) Why does the CPSC believe the protocol is reproducible?
2.) Does the CPSC believe that the proposed rule adequately represents composite furniture performance?
3.) If the standard cigarette used in smolder ignition tests for upholstered furniture becomes obsolete, does the CPSC have an alternative ignition source in mind?
4.) SPUF is an important factor in Section 1634 testing. In practice, there are a number of different "standard" test methods and testing devices used to determine the air permeability of a foam specimen. Will a standard test method be specified for determining the physical properties of SPUF, including air permeability and contents?

PFA looks forward to working with the CPSC, interested citizens, and the residential upholstered furniture industry in developing sound standards that address flammability concerns. We believe this proposed rule is a good starting point for that work.

Sincerely,

Robert J. Luedeka

Robert Luedeka
Executive Director
Polyurethane Foam Association

Stevenson, Todd

From: James T. McIntyre [JMcIntyre@McIntyreLF.com]
Sent: Monday, May 19, 2008 4:22 PM
To: CPSC-OS
Subject: Comments on the Standard for the Flammability of Residential Upholstered Furniture
Attachments: Final Comments 5-19-08 ON PFA LTRHEAD.doc

Please find the comments of the Polyurethane Foam Association on the above referenced Rule Making attached.

May 19, 2008

US Consumer Products Safety Commission
4330 East West Highway
Bethesda, MD 20814

Attention: Mr. Dale Ray

Via Email: cpsc-os@cpsc.gov

Dear Mr. Ray:

The American Apparel and Footwear Association has reviewed the proposed language for 16 CFR 1634 concerning the flammability of residential upholstered furniture.

We would like to express our support for the revised language proposal as supplied to the CPSC by Coats North America (dated May 2, 2008 and submitted by Chris Smith, Director of Governmental Affairs, CNA) This proposal by CNA advocates requirements for additional criteria related to the testing for the flammability of seams in upholstered products. AAFA feels that not only does this type of inclusion help to make a safer product by limiting flame exposure at potential failure points but this consideration would also continue a precedent previously established in similar CFR's such as CFR1633 which deals with flammability of mattresses.

Please consider these suggested changes in your next drafting of CFR 1634.

Sincerely,

Steve Lamar
Executive Vice President
American Apparel & Footwear Association (AAFA)

Attachment

Stevenson, Todd

From: Steve Lamar [slamar@apparelandfootwear.org]
Sent: Monday, May 19, 2008 4:36 PM
To: CPSC-OS; Ray, Dale
Cc: Rebecca Mond
Subject: AAFA Comments on Sewing Thread and Upholstered Furniture
Attachments: May 19 Comments to CPSC on Upholstered Furniture.pdf

Mr. Ray – Please find attached comments. Please confirm that you received these. Thanks. Steve

Stephen Lamar
Executive Vice President
American Apparel & Footwear Association (AAFA)
1601 N. Kent Street, 12th Floor
Arlington, VA 22209
Dir: 703-797-9041
Cell: 571-332-6449
Fax: 703-522-6741

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Stevenson, Todd

From: DLauzier@ethanalleninc.com
Sent: Monday, May 19, 2008 4:36 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR

Regarding:

CONSUMER PRODUCT SAFETY COMMISSION

16 CFR Part 1634

Standard for the Flammability of Residential Upholstered Furniture

AGENCY: Consumer Product Safety Commission.
ACTION: Notice of proposed rulemaking.

Question:

Given the current implementation as well as the pending legislation regarding Fire Safe Cigarettes, the proposed flammability standard based on a test with a cigarette that is currently unavailable to over 50% of the population does not make sense. The new proposed standard should be a simple update to the UFAC test excepting using the Fire Safe Cigarette.

Daniel Lauzier
Consumer Products Compliance Manager

Ethan Allen Global Inc.
Ethan Allen Drive PO Box 1966
Danbury, CT 06813-1966
203 743 8326 (Office)
860 597 9620 (Cell)
203 743 8236 (Fax)

Federation of Burn Foundations

May 19, 2008

Office of the Secretary
U.S. Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814 (phone: 301-504-7530)

RE: Upholstered Furniture NPR

To the Commission:

The Board of Directors of the Federation of Burn Foundations wishes to endorse the current Proposed Rule "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) as published on March 5, 2008 in the Federal Register.

Our Federation includes 60 organizations in the United States and Canada whose missions and activities specifically support the causes of burn prevention, treatment and recovery. Firefighters, burn care professionals and burn injury survivors are active in the great majority of our member organizations and on our Board of Directors. Thus, we are acutely aware of the impact of fire and burn injury and the need for strong fire safety educational programs, standards and regulations. At the same time, we are increasingly conscious of the need to consider the broader public health impact of any measure designed specifically to prevent or retard the spread of fire.

Thus we applaud the exhaustive analysis by your Commission which has resulted in a proposed "smolder test" standard that addresses ignition by cigarettes, representing 95% of the sources of initial ignition of upholstery. The previously discussed "open flame" standard directed at the remaining 5% of such ignitions could only have been met through great expansion in the use of flame retardant chemicals in the internal foam of upholstered furniture cushions. Our concern about the widely documented hazards of such chemicals is expressed in the attached policy position adopted without dissent by our Board of Director on March 25, 2008, along with a rationale updated through May 16, 2008.

The desire for protection from both fire and chemical hazards has grown steadily in recent decades. The incidence of fire and burn injury has consequently declined, and will likely continue to do so with the advent of cigarette and candle fire safety standards, while the threat of toxic chemicals to public health and the environment has continued to grow. Thus we are relying on your Commission to weigh such evidence carefully, as it has in the current instance, in responding to future proposals regarding consumer product fire safety.

Sincerely,

Gary Hansen, Chairman address at: Burns Recovered Support Group
Board of Directors 11710 Administration Drive, Suite 2-B
Federation of Burn Foundations St. Louis, MO 63146

Stevenson, Todd

From: Nancy Huegerich [nhuegerich@yahoo.com]
Sent: Monday, May 19, 2008 4:52 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: Fire Testing Regs - Response Objection.doc

Dear Desk Officer,

Attached is a response to the proposed new regulations for residential upholstered furniture.

Thanks,
Nan Huegerich
Mitchell Gold + Bob Williams
General Counsel
828.632.9200
nan.huegerich@mgandbw.com

The Mitchell Gold Co. d/b/a Mitchell Gold + Bob Williams'
Response and Objection to
Consumer Product Safety Commission's Standard for the Flammability of Residential Upholstered Furniture, Proposed Rules

Mitchell Gold + Bob Williams ("MG+BW") is a North Carolina privately-held corporation with approximately 700 employees. MG+BW manufactures upholstered furniture in Taylorsville, North Carolina, for sale to retailers and designers as well as to residential consumers. MG+BW currently obtains certificates from our vendors that materials used in upholstered furniture are CAL 117 compliant. Additionally, MG+BW complies with CAL 133 when required by law.

The Consumer Product Safety Commission's ("CPSC") proposed rules for standards of flammability of residential furniture will have a substantial, negative impact on the business of MG+BW. Domestic furniture manufacturers are already struggling with a depressed market and cheap overseas competition, and to add in these onerous regulations would be disastrous. In the four-county area of North Carolina that includes MG+BW, 47 furniture plants have closed since 2000. Many of the remaining manufacturers are already running on a limited schedule. The implementation of these rules would be an additional burden on an already over-burdened industry.

No Substantial Benefit

The burden of these proposals far outweighs any potential benefit, even considering the proposals in the light most favorable to the CPSC's conclusions. As to the cigarette smolder test, MG+BW already requires certifications from its vendors of compliance with CAL 117. As such, there is no additional benefit to the end consumer of the certifications required by these proposed rules. As to the open flame test, it is questionable in what circumstances an open flame will ever be in contact with a piece of upholstered furniture. The most likely instance in which an open flame could ignite a piece of upholstered furniture, in light of the CAL 117 treatment, is if a fire engulfed the furniture. In this case, compliance with these new, proposed rules will not deter the residence's burning. Consumers will receive no substantial benefit from these proposed rules, just a higher price tag.

High Burden

The burden of these rules is extremely high. The only options available to a company such as MG+BW are to build, man, and operate an in-house testing lab, for which MG+BW has neither room nor expertise nor funds, or to out-source testing to a professional lab, which will undoubtedly be expensive. Neither of these options seem realistic. But the logistical hurdles of these rules go far beyond the question of where the product will be tested. A growing segment of our business involves COM (customer own material) products. In these cases, MG+BW often does not see the COM fabric until an order has been placed and it is received in house. At this point, we have already priced the order. We do not know if the fabric will pass the requisite tests as is, or if it will

require a barrier fabric. Are we to price everything worst case scenario, assuming it will need a barrier? We will certainly lose a substantial amount of business if we do.

Less Burdensome Alternative

A less burdensome alternative would be to require that furniture manufacturers obtain certifications from fabric manufacturers as to smolder and open flame tests. The fabric manufacturers are more knowledgeable about fabrics and are better equipped to perform the requisite testing than are furniture manufacturers. If the burden of these tests will not be placed with the cigarette manufacturers, where it truly belongs, then it should be placed with the party who can least expensively, and most effectively, comply. Furniture manufacturers purchase the fabric from another, and therefore have no opportunity to build in these fire-retardant characteristics but instead have to attempt to comply with these regulations retroactively by applying additional substances to the fabric or utilizing a barrier fabric. The textile manufacturers would be in the position to implement these rules from the very beginning of the production process, and as such, could implement the rules more efficiently and less expensively. While this alternative would still carry costs that would eventually be passed on to the furniture manufacturers, it presents a slightly less burdensome alternative.

Effect on Product

In the past, we have utilized and tested numerous fire retardant spray treatments. These treatments inevitably change the hand of the fabric. Additionally, they may be toxic and could potentially cause illness and open MG+BW up to increased liability. Our experiments with barrier fabrics have proven that most barrier fabrics contain fiberglass, or some other irritant, that causes customer complaints and returns. As such, there is no customer-friendly method by which to comply with these proposed rules. No matter what we do, we will lose business. Additionally, nothing in these rules addresses the fill material. Where a manufacturer already takes steps to use fire-retardant fill material, that manufacturer would be punished by rules that disregard these precautions and encourage instead complete disregard to choice of fill materials. As such, these rules are not technologically practicable or appropriate.

Labeling

The labeling requirements of the proposed rules present an entire new set of costs and logistical quandaries. As a wholesale manufacturer, many of our best customers absolutely require that our products NOT contain any label with the MG+BW name. How will we address this requirement of our customers? How will we produce these labels, and if we cannot produce them, where will we purchase them and how much will they cost? How are we to label each piece of furniture with a lot number, on what will the lot number be based? Are we to base the lot number on the particular date of production, or the type of item, or some other factor? We are simply not equipped to implement these onerous rules.

Conclusion

These rules will have essentially no benefit, but will cause an incredible burden to the domestic manufacturing industry, an industry which is already under extreme pressure. The result of these rules will inevitably be the loss of jobs in the U.S. market as furniture companies find themselves unable to cope with yet one more strike against them.

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Stevenson, Todd

From: Balaburn@aol.com
Sent: Monday, May 19, 2008 5:02 PM
To: CPSC-OS
Subject: Upholstered Furniture NPR
Attachments: FBF cover letter to CPSC.2008-05-19.doc; FBF policy, rationale to CPSC.2008-05-19.doc

Gary Hansen, Chairman
Federation of Burn Foundations
c/o Burns Recovered Support Group
11710 Administration Drive, Suite 2B
St. Louis, MO 63146

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Stevenson, Todd

From:	Arlene Blum [arlene@arleneblum.com]
Sent:	Monday, May 19, 2008 5:43 PM
To:	CPSC-OS
Cc:	Bob Luedeka; Russ Batson; Bart.Broome@asm.ca.gov; mary@safemilk.org; RLong@bluewaternetwork.org; Sara Schedler
Subject:	Upholstered Furniture NPR RESEND with attachment
Attachments:	CPSC comments from Arlene Blum Ph.D.doc

Please note this comment is both below and attached

May 18, 2008
Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway, Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

I applaud the excellent work of the Consumer Product Safety Commission in developing the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) without a small open flame standard for foam.

Historically, small open flame standards for foam have been met with a series of toxic chemicals such as pentaBDE and chlorinated tris or chemicals lacking adequate health information such as Firemaster 550. Many of these chemicals are known to migrate out of furniture and are found in dust, humans, pets, wild animals and the environment. In animal studies, a number these chemical can cause thyroid abnormalities, endocrine disruption, cancer and adverse neurological and reproductive condition such as reduced sperm count, infertility, hyperactivity and learning disabilities.

The current smoldering ignition performance standard for fabrics and other upholstery cover materials should not have a potential adverse impact on health and the environment as would a small open flame standard for foam. However, I am concerned that potentially toxic fire retardant chemicals such as decabromodiphenyl ether (decaBDE) and hexabromocyclododecane (HBCD) could be applied to the back-coating of upholstery fabric to meet this smoldering ignition performance standard.

New research substantiating these health concerns is given below.

1. Furniture and televisions are the primary sources of the brominated fire retardants in U.S. house dust. Joe Allen, as part of a group led by Tom Webster at the Boston University School of Public Health, published a peer-reviewed paper in *Environmental Science & Technology* on April 30, 2008 demonstrating that the **bromine levels in furniture can be related to** pentabromodiphenyl ether (pentaBDE) **levels in dust in homes.**[i]

2. The fire retardant chemicals from furniture end up in people, with children having the highest levels. U.S. citizens harbor levels of fire retardant chemicals that are much higher (between 7.1 and 35

times) than those of Europeans.[ii] Webster's group published the first research to definitively link PBDE concentrations in house dust with concentrations in the people living in those homes. [iii] PBDE levels in house dust were associated with levels in breast milk of nursing mothers.[5] Children take in approximately 7 times more PBDEs each day than adults because they spend so much time putting their hands in their mouths.[iii]

3. One of the primary fire retardant chemicals that could be used to back coat fabric is decaBDE. Although, the bromine industry states that hundreds of studies say that decaBDE does not pose a significant environmental or human health risk, a survey of the peer reviewed literature yields a contrary result. **The majority of the peer-reviewed scientific literature on decaBDE demonstrates accumulation of the fire retardant chemical in humans, wild animals, and the environment; negative health effects in experimental animals and humans; and debromination resulting in conversion of decaBDE into more toxic smaller molecules.**

Pub Med is the established source for the biomedical scientific literature. In a search of their database for decabromodiphenyl ether, 106 articles were found:

· 20 studied health effects in laboratory animals. Findings that included induced DNA damage and decreased sperm count. Exposure studies during pregnancy indicated that decaBDE can be absorbed across the placenta and may be a developmental neurotoxicant, an endocrine disrupter during development and may have other adverse effects on the immune function of the exposed offspring. Two papers submitted by Albemarle Corporation, a major producer of decaBDE, reported no potential adverse effects nor need for further study.

· 3 were related to human health, with reported negative health effects including cell death and potential carcinogenic effects.

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· In 5 wild animal studies, decaBDE or its congeners were detected in all of the animals or associated sediments studied.

· 16 studies found decaPDE in a variety of environments, with one study showing significantly high levels found in air from the dismantling hall of a recycling plant.

· 12 were related to analytical techniques.

· 25 were related to debromination and degradation, both environmental and metabolic, where decaBDE degraded into lower brominated diphenyl ether congeners, which are more bioaccumulative and more toxic. 8 were related to miscellaneous topics and

· 8 were in languages other than English or did not have an abstract or paper available for review.

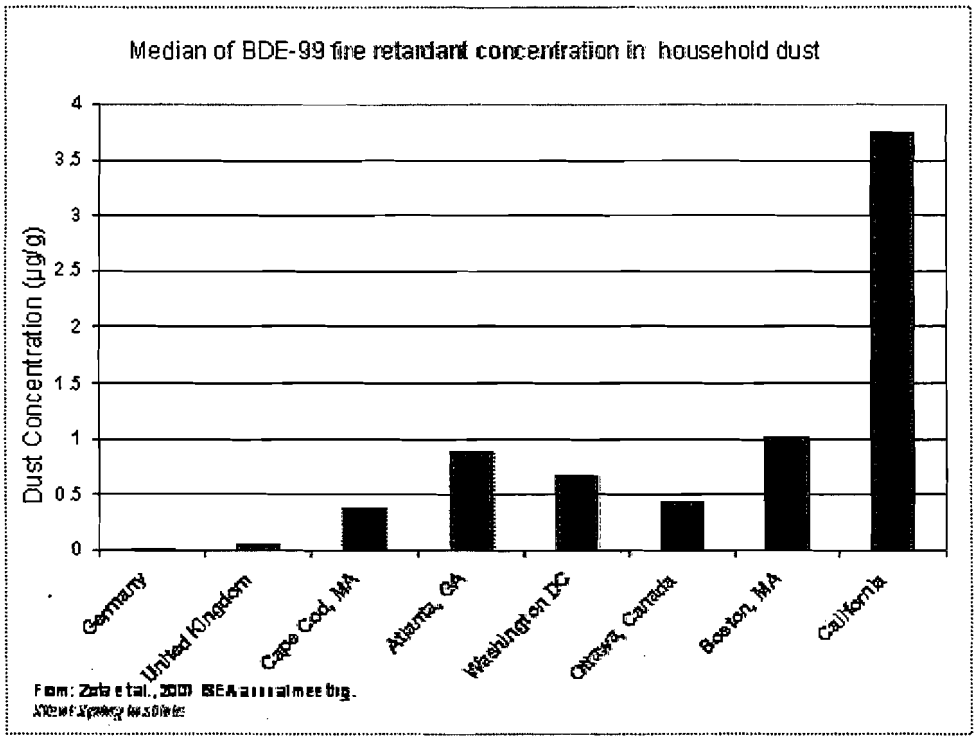
4. If this standard is implemented, potentially toxic fire retardant chemicals are likely to be used in furniture fabric. Many of these chemicals migrate out of consumer products and are found in dust, humans and animals. Europe uses less fire retardants and has much lower levels of these chemicals are found in European dust, human and animal serum, and breast milk compared to the U.S.

Peer reviewed scientific papers demonstrate that chemical fire retardants that could be used to meet such standards migrate out of consumer products into dust, humans, and animals. For example, the state of California had a more rigorous fire safety standard for furniture than other states in the US, which in turn resulted in the use of more PBDE fire retardants in furniture than was used in Europe. California dust has hire levels of fire retardant chemicals than other states which in turn have much higher levels than Europe as can be seen in Figure I below.

Please note that health information can only be obtained after chemicals have been used for a significant period of time. The most information currently available is for pentaBDE, which is closely related in

structure to decaBDE which could be used to back coat fabric. Although banned in the EU and much of the US, pentaBDE continues to migrate from products in consumers' home.

Figure I Comparison of the fire retardant chemical BDE-99 in dust samples from Europe, and six locations in the US. [iv]



California, which has the highest level of fire retardants from use in furniture foam, has the highest level in dust and in breast milk as well.[iv]

The US in general is known to have a much higher level of toxic pentaBDE congeners such as BDE-99 in dust, breast milk and body fluids than does Europe. In the US, median human pentaBDE levels in breast milk range from 34 to 58 nanograms PBDE per g lipid weight which can be compared to levels of 1.3 in Japan, 2.0 in Poland, and 3.2 in Sweden in similar studies as shown in Table 2.[v]

Recent studies of PBDE levels in human breast milk

Study (US)	Year collected	Population	Number of subjects	Median ng/g lipid weight	Range ng/g lipid weight
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Chemically similar retardants are likely to be used if this proposal is passed, and could similarly end up

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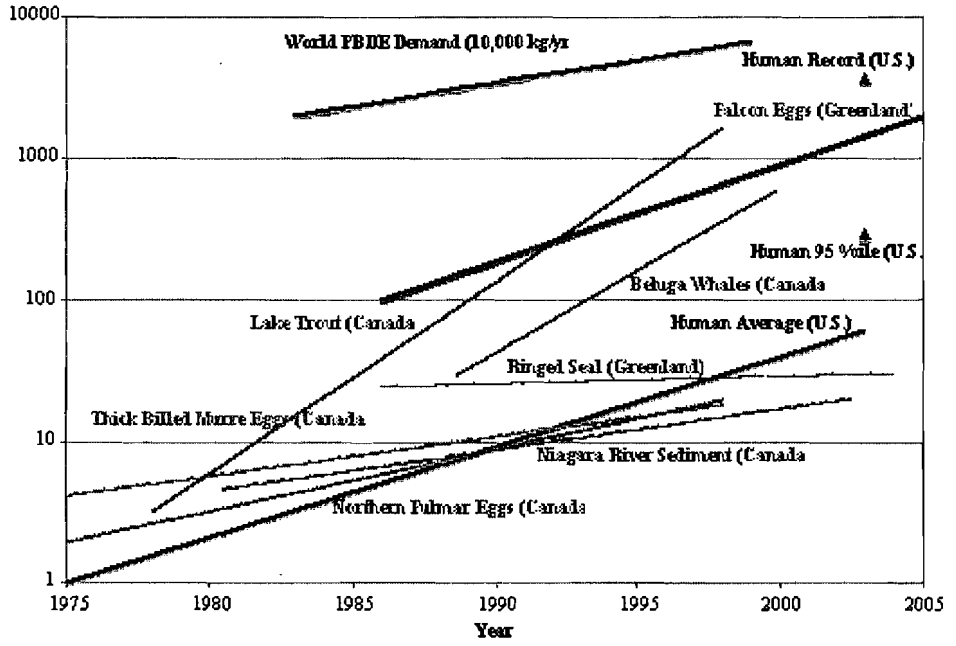
5. The rapid increase in amounts of PBDEs in the environment can be seen from the levels in **eleven species of** wild animals Figure 2. **The increasing level of the body burden of these fire retardant chemicals in wildlife aligns with the increased usage of the chemicals.** Though the magnitude of the body burden varies in different animals, the chart below shows the trend is similarly increasing across the eleven studies included in this survey.[vi]

Figure 2 Logarithmic scale graph of the rapid recent increase in PBDE levels in 10 species of wild animal compared with world demand for PBDEs



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CPSC should require that any chemical flame retardant chemicals to be used in any consumer product such as furniture are fully tested by the manufacturer for potential human health and environmental effects and evaluated for potential lifecycle impacts BEFORE they are used to any manner that could result in with exposure to humans. CPSC should then evaluate the results of these studies to determine whether the proposed use of the chemical is appropriate and safe. Further, labeling of the product for flame retardants should be required to provide information to consumers.

We appreciate the Commission's support for improved fire safety standards that will not lead to the use of potentially toxic fire retardant chemicals. Fire safety must not come at the expense of increasing human and environmental exposure to potentially toxic fire retardant chemicals for which there is inadequate health and safety information.

Thank you.

Sincerely,

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May 15, 2008
Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway, Bethesda, MD 20814

RE: Upholstered Furniture NPR

To the Commission:

I applaud the excellent work of the Consumer Product Safety Commission in developing the proposed rule, "Standard for the Flammability of Residential Upholstered Furniture" (16 CFR Part 1634) without a small open flame standard for foam.

Historically, small open flame standards for foam have been met with a series of toxic chemicals such as pentaBDE and chlorinated tris or chemicals lacking adequate health information such as Firemaster 550. Many of these chemicals are known to migrate out of furniture and are found in dust, humans, pets, wild animals and the environment. In animal studies, a number these chemical can cause thyroid abnormalities, endocrine disruption, cancer and adverse neurological and reproductive condition such as reduced sperm count, infertility, hyperactivity and learning disabilities.

The current smoldering ignition performance standard for fabrics and other upholstery cover materials should not have a potential adverse impact on health and the environment as would a small open flame standard for foam. However, I am concerned that potentially toxic fire retardant chemicals such as decabromodiphenyl ether (decaBDE) and hexabromocyclododecane (HBCD) could be applied to the back-coating of upholstery fabric to meet this smoldering ignition performance standard.

New research substantiating these health concerns is given below:

1. Furniture and televisions are the primary sources of the brominated fire retardants in U.S. house dust. Joe Allen, as part of a group led by Tom Webster at the Boston University School of Public Health, published a peer-reviewed paper in *Environmental Science & Technology* on April 30, 2008 demonstrating that the **bromine levels in furniture can be related to** pentabromodiphenyl ether (pentaBDE) **levels in dust in homes.**[i]

2. The fire retardant chemicals from furniture end up in people, with children having the highest levels. U.S. citizens harbor levels of fire retardant chemicals that are much higher (between 7.1 and 35 times) than those of Europeans.[ii] Webster's group published the first research to definitively link PBDE concentrations in house dust with concentrations in the people living in those homes. [iii] PBDE levels in house dust were

associated with levels in breast milk of nursing mothers.[5] Children take in approximately 7 times more PBDEs each day than adults because they spend so much time putting their hands in their mouths.[iii]

3. One of the primary fire retardant chemicals that could be used to back coat fabric is decaBDE. Although, the bromine industry states that hundreds of studies say that decaBDE does not pose a significant environmental or human health risk, a survey of the peer reviewed literature yields a contrary result. **The majority of the peer-reviewed scientific literature on decaBDE demonstrates accumulation of the fire retardant chemical in humans, wild animals, and the environment; negative health effects in experimental animals and humans; and debromination resulting in conversion of decaBDE into more toxic smaller molecules.**

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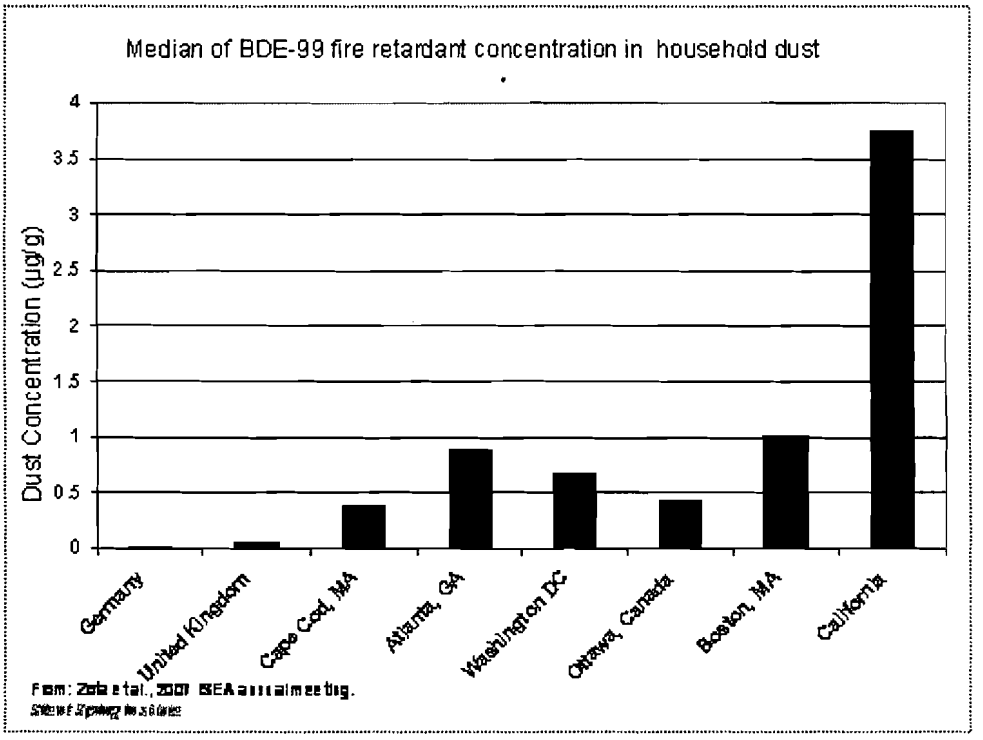

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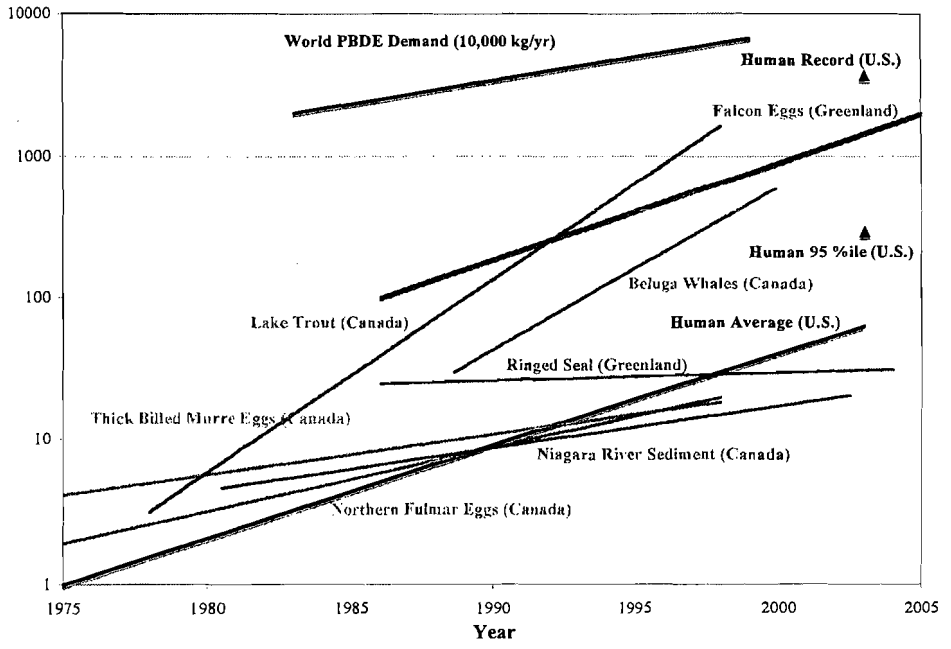

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National Cotton Council of America

Box 820285 • Memphis, TN 38182-0285
(901) 274-9030 • FAX (901) 725-0510
www.cotton.org

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May 19, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814
By e-mail: cpsc-os@cpsc.gov

Re: **Upholstered Furniture NPR**

Dear Sir/Madam Secretary:

These comments are submitted by The National Cotton Council of America (NCC) in response to the Consumer Product Safety Commission (Commission) request for comments on their proposed "Standard for the Flammability of Residential Upholstered Furniture" (73 FR 11702; March 4, 2008). The NCC is the central organization of the United States cotton industry. Its members include producers, ginners, cottonseed handlers, merchants, cooperatives, warehousemen, and textile manufacturers. A majority of the industry is concentrated in 17 cotton-producing states, stretching from the Carolinas to California and the downstream manufacturers of cotton apparel and home furnishings are located in virtually every state.

The industry and its suppliers, together with the cotton product manufacturers, account for more than 440,000 jobs in the U.S. [U.S. Census of Agriculture]. Annual cotton production [about 20 million 480lb bales] is valued at more than $5 billion at the farm gate, the point at which the producer sells [Economic Services, NCC]. While cotton's farm-gate value is significant, a more meaningful measure of cotton's value to the U.S. economy is its retail value. Taken collectively, the annual business revenue generated by cotton and its products in the U.S. economy is estimated to be in excess of $120 billion [Retail Values of U.S. Agricultural Commodities, NCC].

NCC has supported efforts by CPSC to improve the flammability characteristics of upholstered furniture. NCC has supported the Upholstered Furniture Action Council's (UFAC) voluntary program since it came into use in 1978 and agrees with CPSC and others that this program has been very successful in reducing fires associated with the ignition of upholstered furniture. In all of the CPSC numerous efforts over the past 35 years to address the flammability of upholstered furniture NCC has been actively involved and had many technical discussions with Commission staff and other industry sectors on this issue.

CPSC has proposed a completely new, insufficiently vetted, smoldering test method for fabrics and based their standard for reducing the flammability risk associated with upholstered furniture totally on the protection provided by smoldering ignition resistance of the upholstery fabric. It appears that the FR requirements for polyurethane foam were dropped because of concerns about human health and chemical safety. However, that change places more emphasis on the upholstery fabrics industry to use flame resistant chemicals to achieve Type 1 Furniture. Chemicals will have to be used for some fabrics to be able to meet the smolder test requirements.

In this current proposed rulemaking, the Commission has moved far too quickly based on unproven assumptions and without appropriate small-scale data and no full-scale data to support the proposal, i.e., without the normal back-up studies and supporting information necessary for such an important regulation. Commissioner Moore has raised these same issues. In his December 27, 2007 statement made before voting to go forward to the NPR phase and in the Commission's February 1, 2008 Press Release, he stated:

> *"Until validation testing is done on large-scale mockups or full-scale furniture samples, we do not know how effective the standard will really be or how well the bench-scale mockup is at predicting effectiveness."*

CPSC states that about 84% of current fabrics will pass option 1 of the new test but offers no data or details on how they determined that number. CPSC indicates many UFAC class 1 fabrics will pass the new test method but also says that not all UFAC class 1 fabrics will pass. This rushed proposal has allowed little time for industry to conduct tests and does not allow for a thorough evaluation of the test method by those who most will be affected greatest – the upholstery fabric industry. The textile and upholstery fabrics industries in the United States have changed drastically over the past five years and the proposal does not appear to acknowledge these changes and does not address other options for addressing the problem.

The standard is intended to prevent the flammability problem associated with upholstered furniture. Before CPSC promulgates a final rule it is imperative that more testing be done to evaluate fully whether the proposal is economically and technologically feasible, whether it will reduce the flammability of residential upholstered furniture, and its impact on the industry and consumers.

SOME SPECIFIC COMMENTS

The CPSC test method has not undergone an evaluation to determine its precision and bias or had been compared with full scale testing, so it is not know whether the proposed test method is meaningful or is a predictor of the problem it is supposed to be addressing.

CPSC has not produced test data, either small-scale or large-scale that is adequate to show that the proposal will be effective in reducing smoldering fires in upholstered furniture. This proposed rule penalizes only one sector of the supply chain -- the small business dominated decorative fabric weavers.

The focus of this proposed rule appears to be heavyweight cellulosic (cotton, rayon, etc.) fabrics that do not perform as well as thermoplastic fibers fabrics or lighter weight cellulosic fabrics in smoldering tests. However CPSC offers no data to support their supposition that heavyweight cellulosic fabrics are the main fabrics involved in upholstered furniture fires. NCC believes these types of fabrics are being falsely accused as problem fabrics and should not be singled out as the culprits when they are rarely involved in fires.

The fabric test for Type 1 Furniture is sufficiently different from other tests that it is impossible to predict how a fabric will perform in the new test based on past performance. So fabric testing conducted by industry and government over the past 30 years cannot be used to determine the impact of the new fabric test for Type 1 Furniture. Industry is testing products for Type 1 Furniture but has not had time to do enough testing to allow conclusions to be drawn.

Reduced Ignition Propensity (RIP) Cigarettes

RIP cigarettes, a relatively new product, can have a greater impact on reducing the number of furniture fires started by smoldering sources at a lower cost than any single solution that has been proposed. "Reduced ignition propensity" (RIP) cigarettes are considered by many to be a practical, and effective way to reduce the risk of cigarette-ignited fires. According to the Coalition for Fire Safe Cigarettes, at least 76% of the U.S. population is now or soon will be better protected by RIP cigarettes and all of Canada now have RIP cigarette requirements. Other US states have introduced legislation. New York State was the first state to require that cigarettes sold and manufactured in the state be RIP. In Canada, RIP cigarettes are required nationwide using the New York state standard. EU member states on 30 Nov 2007 endorsed plans to allow only RIP cigarettes to be sold in Europe, a move which could take two or three years to come into force. The 27 EU nations approved a European Commission proposal which would require the tobacco industry to use fire-retardant paper in all cigarettes in order to cut down on the number of sometimes fatal fires which dropped cigarettes cause each year. In 2007 and early 2008 the two largest USA manufacturers, Phillip Morris USA and R.J. Reynolds Tobacco Company, announced that they already are or will manufacture all of their cigarette brands using "fire-safe" RIP technology and both companies don't oppose regulations that are in line with standards at least 22 other US states have adopted.

The current CPSC smolder test method uses a standard/specified cigarette ("Pall Mall®") as the ignition source. It has become difficult to obtain this standard cigarette. A substitute standard/specified ignition source, which would make the ignition source more uniform and available and improve the precision of the test, is needed to replace the standard/specified cigarette. RIP cigarettes meet an established cigarette fire safety performance standard based on ASTM 2187-04 (ASTM E 2187-04, *Standard Test Method for Measuring the Ignition Strength of Cigarettes*; http://firesafecigarettes.org/assets/files/NISTstandard.pdf). Since the RIP cigarette is now the dominate cigarette and soon will be the only cigarette, CPSC should adopt it as the ignition source for this standard. RIP cigarettes will not necessarily provide 100% protection against smoldering furniture fires, which are 90% of the fires associated with upholstered furniture, but RIP cigarettes can address a very large proportion of cigarette ignition fires, and would have a much quicker impact than any mandatory standard.

Options for Fabrics that Do Not Pass the Fabric Test for Type I Furniture

Fabric manufacturers have three options when a fabric does not pass the Type I Furniture test:
1) the fabric can be re-engineered;
2) the fabric can be treated with flame retardant (FR) chemicals; and
3) the fabric can be sold for use in Type 2 Furniture using an appropriate barrier.

All three options lead to incurred costs and options one and two incur additional changes in fabric aesthetics such as drape, hand and perhaps functionality. Changes in constructions, fiber blends and other changes have optimized the performance of these fabrics. Additional changes will lead to large shifts in the overall types of fabrics offered by our industry – changes that our customers do not desire.

The upholstery fabrics industry always does its best to select chemical treatments which are safe to humans and the environment. It is important to note that chemical treatments on fabrics, by their very nature, provide an opportunity for exposure to chemicals via absorption (skin contact), inhalation (breathing) and ingestion (oral contact).

NCC supports the option for Fabric Test for Type 1 Furniture proposed by the National Textile Association in their comments ("Type 1A"). The test is identical to the proposed fabric test for Type 1 Furniture, except unslickened polyester fiberfill is placed between the cover fabric and foam. This is one of the most common furniture constructions in use today and fabrics that meet the pass/fail criteria of the fabric test for Type 1 Furniture should be allowed for use in appropriate furniture constructions. In conducting these tests (Type 1 and Type 1A), NCC supports the use of RIP cigarettes.

SUMMARY

NCC appreciates the opportunity to comment on this rulemaking and urges CPSC to adopt the suggested option 1A and use RIP cigarettes for the cigarette smolder testing. In addition, CPSC should be required to conduct full scale testing and precision and bias testing before promulgating a final rule to address the flammability of residential upholstered furniture.

Sincerely,

Bill M. Norman

Bill M. Norman, D. Engr.
Vice President, Technical Services
National Cotton Council

Stevenson, Todd

From: Phil Wakelyn [PWAKELYN@cotton.org]
Sent: Monday, May 19, 2008 5:49 PM
To: CPSC-OS
Subject: Re: Upholstered Furniture NPR

Attachments: 08CPSC comments UP Furn pw bmn Secretary 0514.doc

08CPSC comments
UP Furn pw bmn...

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Dear Sir/Madam

These comments are submitted by The National Cotton Council of America (NCC) in response to the Consumer Product Safety Commission (Commission) request for comments on their proposed "Standard for the Flammability of Residential Upholstered Furniture" (73 FR 11702; March 4, 2008).

Sincerely

P.J. Wakelyn

Association of Woodworking & Furnishings Suppliers
500 Citadel Drive
City of Commerce, CA 90040
Phone: 323-838-9440 / FAX 323-838-9443

May 19, 2008

Office of the Secretary
Consumer Products Safety Commission
Room 502
4330 East West Highway
Bethesda, MD 20814

The Association of Woodworking and Furnishings Suppliers (AWFS) is a California based trade association. Our membership includes manufacturers and distributors of machinery, hardware, lumber and wood products, upholstery and bedding materials, and other related supplies. Our clients include manufacturers of upholstered furniture and other home furnishings. As such, we would like to offer the following comments on the proposed CPSC rule 16 CFR 1634, Standard for the Flammability of Residential Upholstered Furniture.

1. First and foremost, AWFS opposes the creation of any additional, burdensome government regulations affecting its members and their clients. The upholstered furniture industry has been proactive in its self-regulation of flammability under UFAC. Approximately 90% of upholstered furniture voluntarily conforms to the UFAC standards, in the absence of a Federal flammability standard.

2. California furniture manufacturers already comply with the requirements of BHFTI TB-117, whose requirements exceed those of the proposed Federal standard. Many manufacturers outside of California voluntarily build to this standard.

3. US manufacturers are already faced with a number of factors that place them at a competitive disadvantage with foreign competitors. This regulation requires merely the labeling of furniture. It does not have provisions for verification or independent testing of furniture produced by foreign manufacturers or importers.

4. Mandating Reduced–IP cigarettes in all 50 states would greatly reduce the risk of smoldering fires in furniture without placing additional burden for testing and record-keeping on furniture manufacturers and their suppliers.

5. The assumption of the CPSC is that 100% of the upholstered furniture covered in fabrics that are deemed to be either severely or moderately prone to ignition by cigarettes will regularly be exposed to that threat. If the number of non-smoking households are factored in, those numbers are reduced by more than half, calling into question the need for a new standard.

We ask that you consider all alternatives before enacting into law this flammability standard for which the CPSC has neither the resources nor the means to adequately enforce.

Regards,
Gene Valcke
Member: AWFS Public Policy Committee
California BHFTI Consumer Advisory Council

Stevenson, Todd

From: Gene Valcke [gene.valcke@hanesindustries.com]
Sent: Tuesday, May 20, 2008 1:26 AM
To: CPSC-OS
Subject: Upholstered Furniture NPR.doc
Attachments: Upholstered Furniture NPR.doc

Attached is my comment on behalf of the Association of Woodworking & Furnishings Suppliers on 16 CFR 1634.

Gene Valcke

State of West Virginia
Department of Military Affairs and Public Safety

Sterling Lewis, Jr.
State Fire Marshal

Joe Manchin III, Governor

Phone: (304) 558-2191
Fax: (304) 558-2537

STATE FIRE MARSHAL'S OFFICE
1207 Quarrier St, 2nd Floor
Charleston, WV 25301

May 12, 2008

Office of the Secretary
Consumer Product Safety Commission
4330 East West Highway
Bethesda, MD 20814

Dear Chairwoman Nord:

I am writing on behalf of the West Virginia State Fire Marshal's Office to express our concerns for the direction the CPSC is moving in response to fire safety standards on residential furniture. As State Fire Marshal I feel this is a misdirected rule and that it undermines our state's ability to protect our citizens.

In 2004, all stakeholders reached a consensus on a standard that would make sure all parts of a piece of furniture are flame retarded. It was agreed that both the covering textile and the foam needed to be retarded in order solve the problem of furniture fires. Ignoring this consensus, the CPSC staff continued to release proposals either calling for treating the covering fabric or the foam, but not the entire piece of furniture.

Chemical flame retardants are used to protect the foam as well as the covering fabric from both small open flames and smoldering ignition. While they do not put out fires, they do provide crucial added time for the occupants to leave the residence, thus saving lives of many West Virginians. The reduction in fire deaths over the years has been attributed to the use of approved and studied chemical flame retardants. To eliminate this important tool from the fire safety tool box will result in an increase in fire deaths and property damage.

In fact, it is quite possible that measures like the one being considered by the Commission could weaken the existing fire safety standard that our office has fought to keep in place. The CPSC must take the time and consideration to propose a concept that will not require adjustments and further debate in the coming years.

The CPSC should reconsider the stakeholder agreement from 2004, designed to protect the fabric and the foam, resulting in a standard that will provide the maximum protection to the public.

Sincerely,

Sterling Lewis, Jr.
WV State Fire Marshal