CPSC MEETING LOG
UPHOLSTERED FURNITURE

Meeting between: CPSC Chairman Ann Brown and representatives of the American Textile Manufacturers Institute and the American Fiber Manufacturers Association

Date of Meeting: February 9, 1999

Site of Meeting: CPSC Headquarters, East West Towers, Bethesda, MD

Meeting Topic: ATMI/AFMA testing of conventional and flame retardant backcoated upholstered furniture fabrics

Log Entry By: Dale R. Ray, CPSC Project Manager

Participants:

CPSC: Ann Brown, Chairman
Walt Sanders, Counselor to the Chairman
Jeffrey Bromme, General Counsel
Ronald Medford, AED/Hazard Ident. & Reduction
Dale Ray, Project Manager, EC
Warren Prunella & Charles Smith, EC
Patricia Bittner, HS
James Hoebel, ES
Andrew Ulsamer & Linda Fansler, LS

ATMI: Patty Adair, Ass't. Director, Textile Products & Stds.
AFMA: Robert Barker, VP, Government Affairs
Steven Mischen, Exec. VP, Burlington Industries
Roger Berkley, President, Weave Corp.
Salman Chaudhry, Ass't. Mgr./QC, Weave Corp.
Kurt Reimann, Research Mgr., BASF Corp.
Phil Stricklen, Research Associate, Amoco

Other Attendees: Phillip Wakelyn, Nat'l. Cotton Council
Karen Suhr, Nat'l, Ass'n. of State Fire Marshals
Bruce Navarro, Navarro Leg. & Reg. Affairs
Mary M. McNamara, American Furniture Mfrs. Ass'n.
Peter Mayberry & Carrie Wirsing, INDA
Fran Lichtenberg, Society of the Plastics Industry
Richard Mann, Keller & Heckman (SPI counsel)
John Whalen, BNA (Product Safety & Liability Reporter)

Summary:

ATMI and AFMA requested this meeting to present information on the progress of some industry-sponsored flammability testing of fabrics, including flame retardant (FR) backcoated fabrics, using CPSC's test method and test apparatus. The participants also discussed some textile industry concerns arising from this testing about the feasibility of the CPSC staff's draft small open flame standard. The ATMI and AFMA representatives also presented information to the Chairman and staff on industry-sponsored studies of the potential economic impact of a small open flame upholstered furniture standard on textile producers and related industries. These topics were discussed as a follow-up to ATMI's September 18, 1998 meetings with the Chairman and Commissioners, at which ATMI representatives promised to provide occasional updates on the status of their activities.

Chairman Brown opened the meeting with some introductory remarks. She noted that no Commission decisions had been made about the direction of the upholstered furniture project, but that she considered the fire losses associated with upholstered furniture fires--especially deaths and injuries to young children--to be a serious problem.

Ms. Adair gave a brief overview of the ATMI/AFMA joint study on FR backcoated fabrics, and introduced brief reports by Mr. Berkley, Mr. Barker and Mr. Mischen. Mr. Berkley stated the overall conclusions that a) fabric performance was difficult to predict accurately with the CPSC draft test method; b) fabric variability was a significant contributor to, but not the only one factor in, this unpredictability; c) even fabrics treated in the United Kingdom, where FR technology is widely used, may not be small open flame resistant; and d) some fabrics, especially textured or loose fitting fabrics, may not be able to meet a standard. Mr. Berkley stated his view that carefully targeted information and education programs may be the most cost-effective course.

Mr. Barker described the test program, in which 31 non-FR (i.e., untreated) fabrics from ATMI/AFMA member companies, comprising a range of fabric types and weights (but not representative of the residential upholstery market), were tested in mockups using the methodology and apparatus developed by the CPSC staff; 3 of these untreated fabrics (a 100% nylon, a 50/50 nylon/rayon blend, and a heavy cotton/wool/nylon blend) met the performance criteria of the CPSC draft standard. The 31 fabrics were then FR backcoated in the U.K., using a system designed to achieve compliance with the existing U.K. Regulations. Of these, 14 "failed" the CPSC test. Mr. Barker stated that the test program was not designed to "test the test," but he suggested that the CPSC test method was vulnerable to operator error in many areas. A summary of the ATMI/AFMA joint test program activities appears in Attachment 1.

Mr. Mischen described the status of industry-sponsored economic studies. These are to include: a) a critique of the 1997 CPSC staff Economic Considerations report; b) a survey of textile industry producers and suppliers to gather information on possible impacts of a flammability standard; and c) a cost-benefit analysis of a small

open flame standard. The first phase (the staff report critique) is due to be completed in the Spring of 1999.

Chairman Brown asked a number of questions about the industry test program. In response to these questions, the industry representatives noted that all of the 31 FR test fabrics in their study were backcoated, rather than immersion-treated as would be likely for many predominantly cotton fabrics. In separate industry tests of a limited number of immersion-treated, predominantly cotton fabrics, these fabrics performed well, and met the performance criteria of the CPSC draft standard.

The industry representatives and the CPSC staff continued a technical discussion about test method issues and the effects of fabric characteristics on small open flame performance. Dr. Reimann gave a presentation about BASF's testing of 201 fabric/filling material combinations, which included (but was not limited to) the 31 ATMI/AFMA fabrics. He confirmed that some non-FR fabrics, in combination with non-FR polyurethane foam fillings, would "pass" the CPSC test, although a variety of fabrics intended to comply with the U.K. Regulations or California's regulations (Technical Bulletins 117 and 133) would not. A number of technical issues related to the test method and apparatus were also raised. Dr. Reimann's presentation slides appear in Attachment 2. An expanded discussion of the BASF test program is to be presented at the March 9, 1999 flammability seminar sponsored by the American Furniture Manufacturers Association in Greensboro, NC.

One issue discussed was the effect of water soaking of treated fabrics--a provision in the CPSC staff draft standard to preclude the use of non-durable surface FR treatments. It was reported that in some cotton fabrics, water soaking may have improved ignition resistance by washing away smolder-promoting alkali metal ions from the fabrics' surface. The extent to which this factor would affect the likelihood of passing the test is uncertain.

The CPSC staff requested some additional information on the way the industry's tests were conducted, and suggested a number of possible reasons for the problems encountered by the test personnel. The staff agreed that some additional CPSC testing was warranted to identify potential problems, and that refinement of the CPSC test method would be considered. The staff also stated an intent to consider a round robin test series using multiple laboratories, to investigate further the repeatability and reproducibility of the CPSC test; this would supplement data obtained from a limited (3 lab) feasibility study conducted in 1996.

The ATMI and AFMA representatives said they would be providing additional test data from further planned testing at the Philadelphia College of Textiles & Science in 1999. These additional tests would examine issues such as air permeability of FR backcoated fabrics, as well as flammability performance. Ms. Adair also invited Commissioners and staff to attend the ATMI Textile Short Course & Plant Tour, scheduled for April 19-22, 1999, to learn more about the textile industry and fabric technology and production.