

CPSA 6 (b)(1) Cleared
4/24/98
No Mfrs/PrvtLbrs of
Products Identified
Excepted by
Firms Notified
Comments Processed

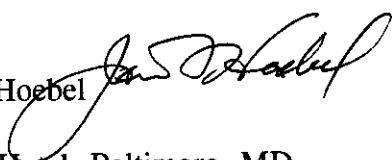
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LOG OF MEETING

SUBJECT: ASTM Subcommittee F15.45 on Candle Products

DATE OF MEETING: April 17, 1998

DATE OF LOG ENTRY: April 22, 1998

PERSON SUBMITTING LOG: James F. Hoebel 

LOCATION: Hyatt Regency Inner Harbor Hotel, Baltimore, MD

CPSC ATTENDEE(S): James F. Hoebel, Engineering Sciences

NON-CPSC ATTENDEE(S): Approximately 40-50 subcommittee members and guests.
ASTM will provide roster when they distribute their minutes.

SUMMARY OF MEETING: The meeting was called to order by the Subcommittee Chairman, Thomas Kreilick, at 9:12 a.m. After self introductions, Kathie Morgan of ASTM reviewed issues relating to the Subcommittee roster (including temporary members) and procedures. Chairman Kreilick stated that he will close future task group meetings to the public if there is media attendance, even if it means that CPSC representatives can no longer participate.

A report from the Data Task Group was provided by J.C. Edmond. Mr. Edmond noted that CPSC had provided that morning an updated hazard report that added 1995 national estimates. Mr. Edmond referred to Table 2 of the CPSC report that showed that most of the fires were "caused" by candles that were unattended, were too close to combustibles, or child play. Mr. Hoebel objected, stating that these patterns were "ignition factors" and not intended to represent the "cause" of the fire. The low estimate of design deficiency as an ignition factor in the CPSC report (one percent) was also cited by Mr. Edmond. An important view of the task group is that candles represent a very low risk, as illustrated by the analysis previously prepared by Dr. Heiden. They felt that going forward with a label requirement could address the identified major factors that a standard would not address. Mr. Hoebel then presented two tables comparing the changes in the number of fires and fire deaths between 1980 and 1995, for a wide selection of consumer products of interest (see attached). These tables illustrated that, of the products presented, candles were last in terms of least desirable change over the time period.

The Terminology Task Group discussion was led by George Pappas. This group had developed a draft terminology standard that was sent out for ballot vote of the Subcommittee. Comments received were discussed and resolved. The need to include gel candles was discussed. One negative comment submitted by Louis Steigerwald was judged persuasive, creating the need to redraft the definition of "candle". The task group will redraft the



definition, and also consider how to handle figurine and other non-pillar freestanding candles. The redraft will be provided to ASTM by May 1, for concurrent balloting by the Subcommittee and the F15 Committee.

The Labeling Task Group report was provided by John Root. They concluded that their recommended label would not be bilingual or contain pictographs. Mr. Root described label language intended to address the three issues of unattended, keep away from children and pets, and avoid combustibles. The attendees agreed that it would be better to say "stay within sight of..." than "stay within view of...". One attendee felt that the label should address the hazard presented by match fragments dropped in the wax. The Task Group will consider the comments provided, and prepare a document for Subcommittee ballot by June 30.

The "New Business" portion of the agenda was devoted to the issue of a possible test standard. Mr. Kreilick paraphrased a letter recently received from Mr. Medford of the CPSC supporting the initiation of such an activity. Mr. Kreilick believed that the industry and the CPSC share ultimate objectives. The question is how to accomplish them. He felt that it is most important to finish the task that has been started.

Mr. Hoebel addressed the Subcommittee. He emphasized the benefits to the industry of developing a test standard. He asked the Subcommittee to appoint a Task Group to begin the process of considering a test standard. A voluntary standard could be developed efficiently that would provide little appreciable cost to manufacturers. Many product industries have done so and found the result to be beneficial. Mr. Hoebel said that we now know the size of the candle fire problem, with some confidence. We also know what kinds of product defects have occurred that could be corrected by a test standard. What we don't know is precisely the contribution of each of these defects to the fires. It is probable that we will never know this precisely: it is the nature of fire investigations to make such information impossible to obtain, or extremely expensive. Occasionally CPSC will conduct intensive in-depth investigations programs, but these are usually in support of a major mandatory standards development process. It was emphasized that such precise information is not needed to proceed with a voluntary standard. Mr. Hoebel also noted that the fire estimate of the ignition factor called "unattended" does not necessarily mean that no candle problem was involved. In fact, if the candle was unattended when ignition occurred, then it is reasonable to believe that a candle problem contributed to the ignition in some of the instances, even when no one was around. It is just too simple to conclude that "unattended" incidents involved only lack of attendance as the only contributing factor.

Mr. Hoebel then displayed a chart of some observed candle hazards that might be addressed by a test standard. (See attached). He suggested that a task group could review these hazards and identify the two or three major hazards based on available data and the direct experience of the candle manufacturers. For example, flammable candle holders, stability, and specifications for wax and wicks could form the basis for an effective voluntary standard that could be produced expeditiously. (Other non-safety provisions could also be included that are of concern to the industry.) In fact, it is likely that some firms already have test programs under way to address such hazards.

Mr. Hoebel told the Subcommittee that developing a test standard had no identifiable downside: a win-win situation. It would be in the firms best interest to have a consensus standard: it keeps the industry in control, it keeps the government away (both from the standpoint of a mandatory regulation and defective product recall actions), keeps the firms out of court, and all at little appreciable cost.

Mr. Edmond agreed that the one percent of incidents citing design deficiency may not be precise, but that it was still relatively low. The industry has already spent over \$100,000 on this activity, in addition to a lot of time. They would like to finish first what has been started, but some more time needs to be taken and there's still a lot to do. He pleaded for a little more time before addressing a test standard.

Dr. Heiden stated that there are not many injuries, and wondered how many are needed to justify such a large effort. Some of the injuries have already been addressed by CPSC recall actions. The behavior content of the data is striking (including NEISS data, consumer complaints, in-depth investigations). Data is important to a performance standard. How do you reduce the greatest risk?

Keith Mowry commented that data is important, but that data can take you only so far. It may provide a certain level of specificity, but then judgment must be considered. This is the nature of safety.

Mr. Kreilick stated that there was no time left at the meeting to make a decision, and he solicited additional individual comments. He stated that he is reluctant to open this issue right now.

The next Subcommittee meeting date was not specified, but is likely to be in the September/October time frame.

(During the meeting, the National Candle Association provided Mr. Hoebel with a notebook containing many news clippings stimulated by the Association on candle fire safety.)

Selected Products of Interest
Ranked by Percent Reduction in Fires
1980-1995

	<u>Fires</u>
All Residential Structure	757,500-451,500 (-44%)
Mattress/Bedclothes, Cigarette Ign.	29,800- 7,300 (-76%)
Wood Heating Equipment	112,000- 29,100 (-74%)
Upholstered Furniture, Cigarette Ign.	24,600- 6,400 (-74%)
Matches	71,600- 22,700 (-68%)
Cigarettes	79,400- 27,000 (-66%)
Gas Fired Heating	27,000- 11,900 (-56%)
Central Heating Units	22,800- 10,100 (-56%)
Upholstered Furniture, Open Flame Ign.	7,400- 3,500 (-53%)
Interior Wallcovering	34,200- 16,300 (-52%)
Liquid Fuel Heating	9,400- 4,700 (-50%)
Mattress/Bedclothes, Open Flame Ign.	21,700- 11,100 (-49%)
Water Heaters	15,400- 7,900 (-49%)
Floor Covering	18,300- 9,800 (-46%)
Washing Machines	3,400- 1,900 (-44%)
Appliances (exc. Heating ,Cooking, Cool)	49,900- 29,700 (-40%)
Electrical Distribution	64,700- 42,100 (-35%)
Ranges/Ovens	124,900- 84,600 (-32%)
Electric Heating	15,400- 10,700 (-31%)
Cooling, Air Conditioning	6,400- 4,600 (-28%)
Electric Cable Insulation	46,400- 33,800 (-27%)
Apparel	22,200- 16,200 (-27%)
Clothes Dryers	19,200- 15,800 (-18%)
Portable Heaters	6,500- 5,400 (-17%)
Cigarette Lighters, Child Play	8,500- 8,200 (- 4%)
Candles	8,800- 8,700 (- 1%)

Selected Products of Interest
Ranked by Percent Reduction in Fire Deaths
1980-1995

	<u>Deaths</u>
All Residential Structure	5,500-3,695 (-33%)
Water Heaters	90- 20 (-78%)
Wood Heating Equipment	350- 90 (-74%)
Interior Wallcovering	520- 220 (-58%)
Upholstered Furniture, Cigarette Ign.	1,150- 500 (-57%)
Upholstered Furniture, Open Flame Ign.	200- 90 (-55%)
Mattress/Bedclothes, Cigarette Ign.	570- 270 (-53%)
Appliances (exc. Heating ,Cooking, Cool)	260- 130 (-50%)
Liquid Fuel Heating	120- 60 (-50%)
Gas Fired Heating	150- 80 (-47%)
Cigarettes	1,980-1,070 (-46%)
Matches	510- 280 (-45%)
Floor Covering	230- 130 (-43%)
Mattress/Bedclothes, Open Flame Ign.	260- 160 (-38%)
Cooling, Air Conditioning	30- 20 (-33%)
Ranges/Ovens	320- 220 (-31%)
Cigarette Lighters, Child Play	240- 180 (-25%)
Electrical Distribution	470- 380 (-19%)
Central Heating Units	90- 80 (-11%)
Electric Cable Insulation	170- 160 (-6%)
Apparel	270- 270 (0)
Clothes Dryers	less than 10- 10 (+?%)
Washing Machines	less than 10- 10 (+?%)
Electric Heating	70- 100 (+43%)
Portable Heaters	90- 150 (+67%)
Candles	20- 80 (+300%)

Some candle hazards that might be addressed by a test standard.

Not ranked.

Flammable candle holders

Glass breakage (glass integrity, excess heat generation)

Other holder breakage

Flaming potpourri

Overheating of metal container

Soot accumulation, control

Terra cotta containers absorb wax, ignite

Wick problems (size, construction, self-extinguishment)

Stability

Wax specifications, quality

Multiple wicks

Flammable fragrances

Other non-fire provisions may be considered