UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814

BALLOT VOTE SHEET

Date: NOV 5 2008

TO : The Commission
Todd A. Stevenson, Secretary

THROUGH: Patricia Semple, Executive Director PS
Cheryl F. Falvey, General Counsel CAF

FROM : David M. DiMatteo, Attorney DMD

SUBJECT : Advance Notice of Proposed Rulemaking: Options to Address Crib Safety Hazards

Ballot Vote Due: NOV 14 2008

Attached is a staff briefing package recommending that the Commission issue an advance notice of proposed rulemaking (ANPR) regarding options to address crib safety hazards. The Commission is required pursuant to Section 104(b)(1)(A) of the Consumer Product Safety Improvement Act of 2008, P.L. 110-314 to examine and assess, in consultation with consumer groups, juvenile product manufacturers, and independent child product engineers and experts, the voluntary standards for, inter alia, full size and non-full-size cribs. The recommended ANPR would be part of this consultative process. The General Counsel memorandum and a draft Federal Register notice (both official use only) are provided under separate cover.

Please indicate your vote on the following options.

1. Publish the Federal Register notice as drafted.

_____ _____
Signature Date

2. Publish the draft Federal Register notice with changes (please specify).

_____
_____
_____

_____ _____
Signature Date

CPSA 6(b)(1) CLEARED for PUBLIC
11/4/08
NO MFRS/PRVTLBLRS OR PRODUCTS IDENTIFIED
EXCEPTED BY: PETITION
RULEMAKING ADMIN. PRCDG

Note: This document has not been reviewed or accepted by the Commission.
Initials MA Date 11/5/08

3. Do not publish the draft Federal Register notice.

_____ _____

Signature Date

Attachment: Staff Briefing Package, *Options to Address Crib Safety Hazards,* October 2008.

UNITED STATES
CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, DC 20207

Memorandum

MEMORANDUM

DATE: NOV 5 2008

To: The Commission
Todd Stevenson, Secretary

Through: Cheryl Falvey, General Counsel CAF
Patricia Semple, Executive Director PS

From: Robert J. Howell, Acting Assistant Executive Director, RH
Office of Hazard Identification and Reduction
Patricia Hackett, Project Manager PH, for
Directorate for Engineering Sciences

SUBJECT: Options to Address Crib Safety Issues

I. ISSUE

The issue at hand is whether the U.S. Consumer Product Safety Commission (CPSC) should begin a consultative process with stakeholders that could result in a proceeding to strengthen the safety standards for full size and non-full size cribs. This issue is being brought to the Commission for consideration because of the continuing fatal and potentially fatal entrapments associated with full size and non-full size cribs, and the apparent lack of effective action on the part of the voluntary standards organizations to adequately address the hazards.

II. BACKGROUND

A. The Products

The Commission has issued mandatory standards under the Federal Hazardous Substance Act for both full size baby cribs and non-full size baby cribs (16 CFR 1508 and 1509 respectively). A full size crib is defined at 16 CFR 1508 as a bed designed to provide sleeping accommodations for an infant and used in the home, with the following interior dimensions: 71 +/- 1.6 centimeters (28 +/- 5/8 inches) wide by 133 +/- 1.6 centimeters (52 3/8 +/- 5/8 inches) long.

A non-full size crib is defined at 16 CFR 1509 with the same wording as a full size crib, but with dimensions that are either greater or smaller than the ones contained in 16 CFR 1508. The regulation specifically excludes mesh/net/screen cribs, nonrigidly constructed cribs, cradles, car beds, baby baskets, and bassinets.

Note: This document has not been reviewed or accepted by the Commission.
Initials rch Date 11/5/08

B. Summary of CPSC Regulatory Activity

The full size crib regulation, 16 CFR 1508, was published in 1973 and amended in 1982. The regulation for non-full size cribs, 16 CFR 1509, was published in 1976 and amended in 1982. Both standards currently contain requirements pertaining to dimensions, spacing of components, hardware, construction and finishing, assembly instructions, cutouts, identifying marks, warning statements, and compliance declarations. In addition, 16 CFR 1509 contains a requirement regarding mattresses.

On December 16, 1996, the Commission published an Advance Notice of Proposed Rulemaking (ANPR) pertaining to crib slat disengagement. The basis for the ANPR was the incident data for an 11-year span, which totaled 138 incidents, including 12 deaths due to entrapment. When slats disengage from the crib side panel, a gap is left between the remaining slats. A child may be able to get his or her body through the space but not his or her head, resulting in entrapment and potentially severe injury or death.

Following publication of the ANPR, ASTM International (formerly known as the American Society for Testing and Materials) published a revised standard for full size cribs (ASTM F 1169-99) in July 1999, which included requirements to address crib slat integrity. Since that time, the rulemaking has remained open and CPSC staff has been monitoring crib incidents, including slat problems and other potential entrapment hazards.

C. Summary of Voluntary Standards

There are several voluntary standards addressing baby cribs. These include, but are not limited to standards issued by the following organizations: ASTM International, Underwriters Laboratories (UL), British Standards Institute (BSI), Health Canada, and the International Organization for Standardization (ISO).

The ASTM crib standards for full size and non-full size cribs are the ones most widely accepted and conformed to in the U.S. In addition, the Juvenile Product Manufacturers Association (JPMA) has a certification program that manufacturers can join to demonstrate and certify that their products meet current applicable ASTM standards. Members in good standing can display a JPMA certification seal on their products as a symbol that they are certified.

The ASTM standard on full size cribs (ASTM F 1169) was first published in 1988 and the current version was published in 2007. This standard refers to 16 CFR 1508 and includes several additional requirements, including corner post extension dimensions, mattress support system requirements, and crib side performance requirements. The ASTM standard on non-full size cribs (ASTM F 1822) was first published in 1997. In 2002, the standard was combined with the play yard standard and the current version (ASTM F 406) was published in 2008. This standard has many requirements, some pertaining only to play yards and others, very similar to what is in ASTM F 1169, pertaining to rigid sided, non-full size cribs.

III. DISCUSSION

A. Summary of Voluntary Standards Activity

CPSC staff has participated in ASTM subcommittee activities on cribs since the standards were first developed. While ASTM has made some revisions in response to staff input in the past, several staff recommendations regarding crib hardware that this ANPR addresses (see Tab A) have been considered by the voluntary standards subcommittee, but as of yet, no additional performance requirements have been agreed upon. More recent staff recommendations have involved assembly issues and strength/quality of wood (see Tab B).

B. Incident Data

Since its inception in November 2007, the CPSC Early Warning System (EWS) has led to the evaluation of over 1200 crib incidents and related issues. These include incidents involving hardware systems, assembly errors, wood quality, bedding issues, paint problems, and general design concerns. Since that time, the EWS has identified many issues with cribs which have led or could lead to entrapment and strangulation. In the last year, CPSC staff has assigned over 250 crib incidents for follow up in-depth investigations (IDI), including nine entrapment deaths and many injuries or near misses, where hardware has been the issue.

As a result of the EWS review, the Office of Compliance staff has opened seven investigative cases pertaining to crib hazards. Five of these investigations resulted in a recall of over 2.5 million cribs and pertain to such issues as drop side hardware defects, wood quality issues, and dimensional defects. Investigations that are still pending resolution also pertain to drop side hardware related problems.

C. Review of Incident Data

1. Drop-Sided Cribs and Related Hardware Systems

A review of the incident data and follow up investigations seen in the EWS have indicated that cribs with drop sides are the type most likely to experience hardware problems. Due to their design, these cribs contain additional moving parts and have more non-rigid joints or connections between components than non-drop-sided cribs. Of particular interest are several incidents where the drop side disengaged in one or more corners due to a variety of reasons, including design defects. These disengagements can go undetected by parents or caregivers and can worsen when the baby pushes or leans against the side of the crib.

With some drop side crib designs, because of the presence of the drop side, the rest of the crib can often experience more movement or stresses during foreseeable use situations than the same crib without a drop side. This can result in problems manifesting in other components on the crib, such as the mattress support system, or the stationary side hardware connections. Thus, hazards seen on other hardware systems on a drop-sided crib might be caused or exacerbated by the design and use of the drop side system. Staff does not believe that there are adequate

performance requirements in either the mandatory or ASTM voluntary standards pertaining to the durability of drop side systems and related hardware.

2. Other Hardware Issues

The EWS has also uncovered other hardware issues in cribs experienced on both drop-sided cribs and non-drop-sided cribs. Although some cribs do not have a drop side, they all have mattress support systems that typically use hardware to connect to the sides of the crib. Staff has reviewed dozens of incident reports from the early warning program relating to mattress support systems, many of which were on drop-sided cribs but some that have failed in non-drop-sided cribs. These failures typically involve hardware issues, though some are wood component problems.

Though not as numerous, staff has also reviewed incident reports of problems with rigidly connected components, such as a bolted connection or a screw-to-metal insert connection between two stationary sides of the crib. These incidents also span both drop-sided cribs and non-drop-sided cribs.

Missing, damaged or broken hardware can result in the partial separation of a crib component from the rest of the crib. This can generate gaps that may allow an infants body to pass through and trap the infant at the head or neck, resulting in strangulation deaths. Infants can also suffocate when the head becomes wedged in the space between the crib frame and the mattress.

Staff does not believe that there are adequate performance requirements in either the mandatory or ASTM voluntary standards pertaining to the durability of other crib hardware systems.

3. Assembly and Instructional Issues

In many incidents, including at least four fatalities, consumer-installed crib components were found to have been installed incorrectly or incompletely. These component installation errors can easily remain undetected by the parents because the crib will still work despite the mis-assembly. Staff's review of various crib assembly instructions shows a varied approach and often inadequate warnings regarding the consequences of a mis-installation. Staff does not believe that there are adequate requirements in either the mandatory or ASTM voluntary standards pertaining to assembly hazards.

4. Wood Quality/Strength

Another serious hazard uncovered by the EWS was a quality/strength issue of wood components. Because there are no performance requirements in either the CPSC mandatory or ASTM voluntary standards for wood quality and integrity, this problem was not discovered during the manufacturing of these cribs. A wood quality problem can result in a fractured or missing slat, creating a gap that can lead to entrapment. Staff does not believe that there are adequate performance requirements in either the mandatory or ASTM voluntary standards pertaining to wood strength or quality.

IV. OPTIONS

Options for Commission consideration include:

1. Issue an ANPR to commence the consultative process required by section 104(b)(1)(A) of the Consumer Product Safety Improvement Act of 2008 which could result in a proceeding under section 104(b)(1)(B) to strengthen the safety standards for full size and non-full size cribs.
2. Direct the staff to continue to work with ASTM to develop one or more additional performance requirements for crib durability which will address the hazards posed by the following: drop-sided cribs and related hardware systems, other hardware issues, assembly and instructional problems, and wood quality/strength issues.
3. Take no further regulatory action to address crib hazards at this time.

V. CONCLUSIONS AND RECOMMENDATIONS

The staff believes that the current mandatory and ASTM voluntary standards are inadequate to prevent entrapment deaths and injuries of young children. Therefore, the staff recommends that the Commission issue an ANPR which could result in a proceeding under section 104(b)(1)(B) to strengthen the safety standards for full size and non-full size cribs in option 1 above. A copy of a draft ANPR (for official use only) is attached to the restricted Office of General Counsel Memorandum for consideration by the Commission.

TAB A

U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207

September 23, 2002

William Suvak
ASTM F15.18 Subcommittee Chairman
Child Craft Industries
501 E. Market Street
Salem, IN 47167

Re: ASTM F1169 "Standard Consumer Safety Specification for Full Size Baby Cribs"

Dear Mr. Suvak:

In Fiscal Year 2002, the U.S. Consumer Product Safety Commission (CPSC) staff commenced a project pertaining to crib hardware. This project involves the review and analysis of incident data followed by a technical evaluation of current crib designs to determine if modifications could eliminate some of the incidents. At the present time, CPSC staff has concluded the review and analysis of incident data. A copy of the hazard analysis is enclosed for your information.

The enclosed hazard analysis reviews 156 crib-related deaths that occurred between January 1, 1997, and July 15, 2002. It should be noted that this is a minimum figure, because CPSC does not necessarily receive reports of all product-related deaths that occur, and reporting is not yet complete for all sources for some years. Twenty-nine of the 156 cases specifically mention hardware problems with the cribs.

Of the 29 fatalities involving hardware, all but two mentioned missing or loose screws, brackets, or other attachment devices that fastened the sides of the cribs to the end panels. In the two cases that did not involve side attachment hardware, failures of mattress support hardware were reported.

In addition, staff has reviewed CPSC files of in-depth investigations for non-fatal hardware incidents reported during the same time period. Most of these incidents were identified through consumer complaints of crib attachment and support hardware failure. While the majority of incidents did not involve injury, staff believes that many had the potential for fatal consequences. A listing of these cases will be provided to ASTM at the October 2002 subcommittee meeting.

CPSC staff is continuing our work on this project by evaluating crib hardware designs and comparing the performance requirements of various published crib voluntary standards, such as ASTM F1169, UL 2275, and the Canadian Standard, SOR 86-962.

Based on work completed to date, CPSC staff believes that it may be necessary to add new requirements to or strengthen some of the existing performance requirements in the ASTM standard in order to address crib hardware related issues.

Improving the ASTM standard would be a significant effort towards the goal of reducing crib-related deaths and incidents. CPSC staff recommends that the F15.18 subcommittee form a task group to begin working on this effort.

Please note that the views expressed in this letter are those of the CPSC staff and have not been reviewed or approved by the Commission.

Sincerely,

Patricia L. Hackett
Directorate for Engineering Sciences
U.S. Consumer Product Safety Commission
Phone: 301-504-0494, ext. 1309
Fax: 301-504-0533
Email: phackett@cpsc.gov

cc: Kandi Mell, JPMA

Enclosure

U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814

Patricia L. Hackett
Directorate for Engineering Sciences
Division of Mechanical Engineering

Tel: 301 504-7577
Fax: 301 504-0533
Email: PHackett@cpsc.gov

October 11, 2007

Mr. William Suvak
ASTM F15.18 Subcommittee Chairman
Child Craft Industries
1010 Keller Drive
New Salisbury, Indiana 47161

Re: ASTM F1169, *Standard Consumer Safety Specification for Full Size Baby Cribs*

Dear Mr. Suvak:

U.S. Consumer Product Safety Commission (CPSC) staff* recommends that the ASTM subcommittee for full-size cribs expedite its work to strengthen the existing performance requirements in the ASTM standard for full-size cribs in order to address crib hardware-related issues.

CPSC continues to receive incident reports relating to crib hardware. Many of these incidents pertain to drop side hardware. Based on the structural design differences between a crib with a drop side and one without it, incident reports and evaluation of incident samples indicate that drop sided cribs are more prone to hardware problems that may lead to potential hazards. Compounding the issue is that many consumers do not realize the potentially deadly hazards associated with a crib with broken or missing hardware.

Improving the ASTM standard to address hardware issues would be a significant effort towards the goal of reducing crib-related deaths and incidents. The subcommittee should consider looking at avenues that would eliminate the use of plastic hardware on any movable component of a crib (drop sides and mattress support systems). Additionally, CPSC staff encourages the subcommittee to explore ways to amend the standard in order to significantly reduce the number of movable components of a crib.

* These comments are those of CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

CPSC staff recommends that the F15.18 subcommittee consider this issue in an expedited attempt to find practical solutions to this critical issue. CPSC staff is willing to contribute or participate in this effort as needed.

Sincerely,

Patricia L. Hackett

cc: Kandi Mell, JPMA
Colin Church, CPSC Voluntary Standards Coordinator

TAB B

U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814

May 14, 2008

Mr. Bill Suvak
Chairman, ASTM Crib Standard Subcommittee
1010 Keller Drive NE
New Salisbury, IN 47161

Re: ASTM F1169 *Standard Specification for Full-size Baby Cribs*

Dear Mr. Suvak:

This letter presents recommendations from the U.S. Consumer Product Safety Commission (CPSC) staff[1] regarding revisions to ASTM F1169 *Standard Specification for Full-size Baby Cribs* to address hazards posed by cribs with sides that can be assembled backwards or upside-down. Some crib designs give the appearance of proper assembly with the drop-side inverted. In this configuration, the drop-side can detach from the crib, possibly creating a dangerous gap that may lead to the entrapment and suffocation of infants. CPSC staff is aware of four deaths where the crib's side was installed upside-down[2]. These deaths included a 6-month-old child, a 7-month old child, a 9-month-old child and a 1-year-old child.

Crib failures can result from a combination of hardware and crib design, which allows consumers to install one or more of a crib's components (a side or mattress support platform) in an incorrect orientation while giving a visual appearance that the crib was assembled correctly and without affecting the crib's first or primary use. In some circumstances, such improper assembly can result in unforeseen stresses on the hardware used to secure that component to the rest of the crib. This may contribute to the component detaching from the crib. When a crib side or the mattress support detaches in one or two corners, it creates a gap that can entrap infants. At the April 1, 2008 ASTM subcommittee meeting on full-size cribs, a requirement for drop sides that are assembled by consumers was proposed by the task group assigned to this matter. The requirement stated that a drop side intended to be installed in a defined orientation must meet one of two conditions:

1. It can only be assembled to the crib in one orientation and function as specified in the instructions, or

[1] The views expressed in this letter are those of the CPSC staff and have not been reviewed or approved by, and may not necessarily represent the views of, the Commission.
[2] 061129HBB2115, 071114HCC1107, 070726CAA3587, and 050615CWE5015

2. If it can be assembled in any other orientation, a label must be provided to clearly indicate the proper orientation.

In order to properly address this hazard, CPSC staff recommends that the requirements proposed by the task group be expanded to include all sides and the mattress support platform and that a third requirement be added as follows:

Crib designs that permit backwards or inverted assembly of the drop sides, stationary sides, mattress support platforms, headboards or footboards, shall pass all applicable performance tests in the misassembled state.

If you have any questions regarding this recommendation, please feel free to contact me. Thank you for your consideration of this important consumer product safety concern.

Sincerely,

Jonathan Midgett, Ph.D.
Directorate for Engineering Sciences

cc: Len Morrissey, ASTM International
Colin Church, CPSC Voluntary Standards Coordinator

U.S. CONSUMER PRODUCT SAFETY COMMISSION
4330 EAST WEST HIGHWAY
BETHESDA, MD 20814

Patricia L. Hackett
Directorate for Engineering Sciences
Division of Mechanical Engineering

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August 7, 2008

Ms. William Suvak
ASTM F15.18 Subcommittee Chairman
Child Craft Industries
1010 Keller Drive
New Salisbury, IN 47161

Ms. Kitty Pilarz
ASTM F15.18 Subcommittee Chairman
Fisher Price
636 Girard Avenue
East Aurora, NY 14052

Re: ASTM F1169, *Standard Consumer Safety Specification for Full Size Baby Cribs* and ASTM F406, *Standard Consumer Safety Specification for Play Yards/Non-Full Size Cribs*

Dear Mr. Suvak and Ms. Pilarz:

The U.S. Consumer Product Safety Commission (CPSC) staff* is aware of numerous incidents in the last couple of years involving the failure of wooden slats on baby cribs. These failures involve the fracturing of the wood, either in the middle of the slat or at the connection to one or both of the rails. When a slat breaks, it can present minor hazards including abrasions due to the exposed wood, or severe hazards such as entrapments occurring in the gap created by the broken slat that could result in death.

Recently, the staff has investigated slat breakages on several models of cribs and found them to have been made from weak woods with low densities. CPSC staff believes the properties of the wood contributed to the slat failures.

* These comments are those of the CPSC staff, have not been reviewed or approved by, and may not necessarily reflect the views of, the Commission.

CPSC staff recommends that the ASTM Subcommittees for full size cribs and for play yards/non-full size cribs revise the two referenced standards to include requirements that will address this hazard. The Subcommittees should consider looking at performance requirements that would evaluate the static and dynamic strength of the wood components. CPSC staff is in the process of accumulating test data associated with this hazard and would be happy to share it with the Subcommittee members at the October 2008 meetings.

Improving the ASTM standards to address this hazard would be a significant effort toward reducing crib-related deaths and incidents. CPSC staff recommends that the F15.18 Subcommittees consider this request in an expedited manner in order to develop practical solutions to this critical issue. CPSC staff is willing to contribute or participate in this effort as needed.

Sincerely,

Patricia L. Hackett

cc: Kandi Mell, Juvenile Product Manufacturers Association
Colin Church, CPSC Voluntary Standards Coordinator