§ 1633.8 Findings.

(a) General. In order to issue a flammability standard under the FFA, the FFA requires the Commission to make certain findings and to include these in the regulation, 15 U.S.C. 1193(j)(2). These findings are discussed in this section.

(b) Voluntary standards. No findings concerning compliance with and adequacy of a voluntary standard are necessary because no relevant voluntary standard addressing the risk of injury that is addressed by this regulation has been adopted and implemented.

(c) Relationship of benefits to costs. The Commission estimates the potential total lifetime benefits of a mattress that complies with this standard to range from $45 to $57 per mattress set (based on a 10 year mattress life and a 3% discount rate). The Commission estimates total resource costs of the standard to range from $8 to $22 per mattress. This yields net benefits of $23 to $50 per mattress set. The Commission estimates that aggregate lifetime benefits associated with all mattresses produced the first year the standard becomes effective range from $1,024 to $1,307 million, and that aggregate resource costs associated with these mattresses range from $175 to $511 million, yielding net benefits of about $514 to $1,132 million. Accordingly, the Commission finds that the benefits from the regulation bear a reasonable relationship to its costs.

(d) Least burdensome requirement. The Commission considered the following alternatives: alternative maximum peak heat release rate and test duration, alternative total heat released in the first 10 minutes of the test, mandatory production testing, a longer effective date, taking no action, relying on a voluntary standard, and requiring labeling alone (without any performance requirements). The alternatives of taking no action, relying on a voluntary standard (if one existed), and requiring labeling alone are unlikely to adequately reduce the risk. Requiring a criterion of 25 MJ total heat release during the first 10 minutes of the test instead of 15 MJ would likely reduce the estimated benefits (deaths and injuries reduced) without having much effect on costs. Both options of increasing the duration of the test from 30 minutes to 60 minutes and decreasing the peak rate of heat release from 200 kW to 150 kW would likely increase costs significantly without substantial increase in benefits. Requiring production testing would also likely increase costs. Therefore, the Commission finds that an open flame standard for mattresses with the testing requirements and criteria that are specified in the Commission rule is the least burdensome requirement that would prevent or adequately reduce the risk of injury for which the regulation is being promulgated.

§ 1633.9 Glossary of terms.

(a) Absorbent pad. Pad used on top of mattress. Designed to absorb moisture/body fluids thereby reducing skin irritation, can be one time use.

(b) Basket pad. Cushion for use in an infant basket.

(c) Bunk beds. A tier of beds, usually two or three, in a high frame complete with mattresses (see Figure 11 of this part).

(d) Car bed. Portable bed used to carry a baby in an automobile.

(e) Carriage pad. Cushion to go into a baby carriage.

(f) Chaise lounge. An upholstered couch chair or a couch with a chair back. It has a permanent back rest, no arms, and sleeps one (see Figure 11).

(g) Convertible sofa. An upholstered sofa that converts into an adult sized bed. Mattress unfolds out and up from under the seat cushioning (see Figure 11).

(h) Corner groups. Two twin size bedding sets on frames, usually slipcovered, and abutted to a corner table. They also usually have loose bolsters slipcovered (see Figure 11).

(i) Crib bumper. Padded cushion which goes around three or four sides inside a crib to protect the baby. Can also be used in a playpen.
(j) **Daybed.** Daybed has foundation, usually supported by coil or flat springs, mounted between arms on which mattress is placed. It has permanent arms, no backrest, and sleeps one (see Figure 11).

(k) **Dressing table pad.** Pad to cushion a baby on top of a dressing table.

(l) **Drop-arm loveseat.** When side arms are in vertical position, this piece is a loveseat. The adjustable arms can be lowered to one of four positions for a chaise lounge effect or a single sleeper. The vertical back support always remains upright and stationary (see Figure 11).

(m) **Futon.** A flexible mattress generally used on the floor that can be folded or rolled up for storage. It usually consists of resilient material covered by ticking.

(n) **High riser.** This is a frame of sofa seating height with two equal size mattresses without a backrest. The frame slides out with the lower mattress and rises to form a double or two single beds (see Figure 11).

(o) **Infant carrier and lounge pad.** Pad to cushion a baby in an infant carrier.

(p) **Mattress foundation.** This is a ticking covered structure used to support a mattress or sleep surface. The structure may include constructed frames, foam, box springs or other materials used alone or in combination.

(q) **Murphy bed.** A style of sleep system where the mattress and foundation are fastened to the wall and provide a means to retract or rotate the bed assembly into the wall to release more floor area for other uses.

(r) **Pillow.** Cloth bag filled with resilient material such as feathers, down, sponge rubber, urethane, or fiber used as the support for the head of a person.

(s) **Playpen pad.** Cushion used on the bottom of a playpen.

(t) **Portable crib.** Smaller size than a conventional crib. Can usually be converted into a playpen.

(u) **Quilted** means stitched with thread or by fusion through the ticking and one or more layers of material.

(v) **Roll-away-bed.** Portable bed which has frame that folds with the mattress for compact storage.

(w) **Sleep lounge.** Upholstered seating section which is mounted on a frame. May have bolster pillows along the wall as backrests or may have attached headrests (see Figure 11).

(x) **Stroller pad.** Cushion used in a baby stroller.

(y) **Sofa bed.** These are pieces in which the back of the sofa swings down flat with the seat to form the sleeping surface. Some sofa beds have bedding boxes for storage of bedding. There are two types: the one-piece, where the back and seat are upholstered as a unit, supplying an unbroken sleeping surface; and the two-piece, where back and seat are upholstered separately (see Figure 11 of this part).

(z) **Sofa lounge**—(includes glideouts). Upholstered seating section is mounted on springs and in a frame that permit it to be pulled out for sleeping. Has upholstered backrest bedding box that is hinged. Glideouts are single sleepers with sloping seats and backrests. Seat pulls out from beneath back and evens up to supply level sleeping surface (see Figure 11).

(aa) **Studio couch.** Consists of upholstered seating section on upholstered foundation. Many types convert to twin beds (see Figure 11).

(bb) **Studio divan.** Twin size upholstered seating section with foundation is mounted on metal bed frame. Has no arms or backrest, and sleeps one (see Figure 11 of this part).

(cc) **Trundle bed.** A low bed which is rolled under a larger bed. In some lines, the lower bed springs up to form a double or two single beds as in a high riser (see Figure 11).

(dd) **Tufted** means buttoned or laced through the ticking and upholstery material and/or core, or having the ticking and loft material and/or core drawn together at intervals by any other method which produces a series of depressions on the surface.

(ee) **Twin studio divan.** Frames which glide out (but not up) and use seat cushions, in addition to upholstered foundation to sleep two. Has neither arms nor backrest (see Figure 11).

(ff) **Flip or sleeper chair.** Chair that unfolds to be used for sleeping, typically has several connecting fabric covered, solid foam core segments.