

of the end of each calendar month, for lighters shipped within that month.

(3) Supporting information shall be sufficient to identify the manufacturer or importer, the party to which the lighters were sold, the destination of the lighters, and shall include copies of relevant invoices and importation documents.

APPENDIX A TO PART 1212—FINDINGS UNDER THE CONSUMER PRODUCT SAFETY ACT

Section 9(f) of the Consumer Product Safety Act (15 U.S.C. 2058(f)) requires the Commission to make findings concerning the following topics and to include the findings in the rule. Because the findings are required to be published in the rule, they reflect the information that was available to the Consumer Product Safety Commission (“CPSC” or “Commission”) when the standard was issued on December 22, 1999.

A. The degree and nature of the risk of injury the rule is designed to eliminate or reduce. The standard is designed to reduce the risk of death and injury from accidental fires started by children playing with multi-purpose lighters. The Commission has identified 196 fires that occurred from 1995 through 1998 that were started by children under age 5 playing with multi-purpose lighters. These fires resulted in a total of 35 deaths and 81 injuries. Fire-related injuries include thermal burns—many of high severity—as well as anoxia and other, less serious injuries. The societal costs of these fires is estimated to include \$175 million in deaths, \$13.7 million in injuries, and over \$5 million in property damage. Because these data are from known fires rather than national estimates, the extent of the total problem may be greater. Fires started by children under age 5 are those which the standard would most effectively reduce.

B. The approximate number of consumer products, or types or classes thereof, subject to the rule. The standard covers certain flame-producing devices, commonly known as multi-purpose lighters, that are defined in §1212.2(a) of 16 CFR part 1212. This definition includes products that are referred to as micro-torches. Multi-purpose lighters may use any fuel and may be refillable or non-refillable. Approximately 21 million multi-purpose lighters are expected to be sold to consumers in the U.S. during 1999. Multi-purpose lighters manufactured in the United States, or imported, on or after December 22, 2000 will be required to meet child-resistance requirements. The following products are not multi-purpose lighters: devices intended primarily for igniting cigarettes, cigars, and pipes, whether or not such devices are subject to the requirements of the Safety Stand-

ard for Cigarette Lighters (16 CFR part 1210); devices that contain more than 10 oz. of fuel; and matches.

C. The need of the public for the consumer products subject to the rule, and the probable effect of the rule on the utility, cost, or availability of such products to meet such need. Consumers use multi-purpose lighters primarily to ignite items such as candles, fuel for fireplaces, charcoal or gas-fired grills, camp fires, camp stoves, lanterns, or fuel-fired appliances or devices or their pilot lighters.

1. There will be several types of costs associated with the rule. Manufacturers would have to devote some resources to the development or modification of technology to produce child-resistant multi-purpose lighters. Before being marketed, the lighters must be tested and certified to the new standard. It is also possible that manufacturing child-resistant lighters may require more labor or material than non-child-resistant lighters.

2. Manufacturers will have to modify their existing multi-purpose lighters to comply with the rule. In general, costs that manufacturers would incur in developing, producing, and selling new complying lighters include the following:

- Research and development toward finding the most promising approaches to improving child resistance, including building prototypes and surrogate lighters for preliminary child panel testing;
- Retooling and other production equipment changes required to produce more child-resistant multi-purpose lighters, beyond normal periodic changes made to the plant and equipment;
- Labor and material costs of the additional assembly steps, or modification of assembly steps, in the manufacturing process;
- The additional labeling, recordkeeping, certification, testing, and reporting that will be required for each new model;
- Various administrative costs of compliance, such as legal support and executive time spent at related meetings and activities; and
- Lost revenue if sales are adversely affected.

3. Industry sources have not been able to provide firm estimates of these costs. One major manufacturer has introduced a child-resistant multi-purpose lighter. However, because that company did not previously manufacture a non-child-resistant lighter, it was unable to estimate the incremental cost of developing and manufacturing child-resistant multi-purpose lighters.

4. Assuming that there are 20 manufacturers and that each invests an average of \$2 million to develop and market complying lighters, the total industry cost for research development, retooling, and compliance testing would be approximately \$40 million. If

amortized over a period of 10 years, and assuming a modest 1% sales growth each year, the average of these costs would be about \$0.23 per unit. For a manufacturer with a large market share (i.e., selling several million units or more a year) the cost per unit of the development costs could be lower than the estimated \$0.23 per unit, even at the high end of the estimates. On the other hand, for manufacturers with a small market share, the per-unit development costs would be greater. Some manufacturers with small market shares may even drop out of the market (at least temporarily) or delay entering the market.

5. In addition to the research, development, retooling, and testing costs, material and labor costs are likely to increase. For example, additional labor will be required to add the child-resistant mechanism to the lighter during assembly. Additional materials may also be needed to produce the child-resistant mechanism. While CPSC was unable to obtain reliable estimates, some industry sources indicated that they believed that these costs would be relatively low, probably less than \$0.25 per unit.

6. Multi-purpose lighters will also be required to have a label that identifies the manufacturer and the approximate date of manufacture. However, virtually all products are already labeled in some way. Since the requirement in the rule allows substantial flexibility to the manufacturer in terms of things such as color, size, and location, this requirement is not expected to increase the costs significantly.

7. Certification and testing costs include costs of producing surrogate lighters; conducting child panel tests; and issuing and maintaining records for each model. The largest component of these costs is believed to be building surrogates and conducting child panel tests, which, based on CPSC experience, may cost about \$25,000 per lighter model. Administrative expenses associated with the compliance and related activities are difficult to quantify, since many such activities associated with the rule would probably be carried out anyway and the marginal impact of the recommended rule is probably slight.

8. Multi-purpose lighters are sold in countries other than the United States. Some manufacturers may develop lighters that meet the requirements of the rule for distribution in the United States, but continue to distribute the current, non-child-resistant models in other countries. Thus, some manufacturers may incur the incremental costs associated with producing multiple lines of similar products. These costs could include extra administrative costs required to maintain different lines and the incremental costs of producing different lines of similar products, such as using different molds or different assembly steps. These costs would,

however, be mitigated if similar or identical standards were adopted by other countries. In total, the rule will likely increase the cost of manufacturing multi-purpose lighters by about \$0.48 per unit.

9. At the present time, one manufacturer has about 80-90% of the market for multi-purpose lighters. The other manufacturers, importers, and private labelers divide up the remaining 10-20% of the market. Thus, there is already a very high degree of concentration in the market. Even so, at least two manufacturers have already entered the market with models that are believed to meet the requirements of the rule and at least one other firm is believed to be actively developing a child-resistant lighter. Therefore, the rule is not expected to have any significant impact on competition. Moreover, other firms are expected to enter the market for multi-purpose lighters, and thereby increase competition, as the market expands. Firms that market child-resistant multi-purpose lighters before the standard's effective date may gain an initial competitive advantage. However, any differential impact is likely to be slight and short-lived. Other manufacturers can be expected to have child-resistant multi-purpose lighters developed and ready to market before or soon after the rule goes into effect.

D. *Impact on consumers.* Aside from increased safety, the rule is likely to affect consumers in two ways. First, the increased cost for producing the child-resistant models will likely result in higher retail prices for multi-purpose lighters. Second, the utility derived from child-resistant lighters may be decreased if complying lighters are less easy to operate.

1. Assuming a 100% markup over the incremental cost to manufacturers (estimated at \$0.48/unit), the rule may be expected to increase the retail price of multi-purpose lighters by \$0.96 per unit. The per-unit price increase for micro-torches and other high-end multi-purpose lighters may be higher due to the smaller numbers of such lighters produced.

2. The utility that consumers receive from multi-purpose lighters may be reduced if the rule makes the lighters more difficult to operate. This could result in some consumers switching to substitute products, such as matches. However, as with child-resistant cigarette lighters, the increased difficulty of operating child-resistant multi-purpose lighters is expected to be slight. Moreover, even if some consumers do switch to other products, the risk of fire is not expected to increase significantly. Most cigarette lighters (one possible substitute) must already meet the same child-resistant standard as those applicable to multi-purpose lighters. Although consumers that switch to matches may increase the risk of child-play fires somewhat, matches seem to be inherently

more child resistant than are non-child-resistant multi-purpose lighters. Previously, the CPSC determined that non-child-resistant cigarette lighters were 1.4 times as likely as matches to be involved in child-play fires and 3.9 times as likely to be involved in a child-play death. Thus, even if some consumers did switch to using matches, the risk of child-play fires would still likely be less than if they continued to use non-child-resistant multi-purpose lighters.

3. The total societal costs of fires known to have been started during 1995 through 1998 by children under age 5 playing with multi-purpose lighters was approximately \$194.2 million, or \$48.6 million per year. This is probably an underestimate, since it only includes the cases of which CPSC is aware. During the same period, an estimated 20 million multi-purpose lighters were available for use each year. The societal costs of the fires started by young children attempting to operate multi-purpose lighters is, therefore, about \$2.43 per lighter (\$48.6 million ÷ 20 million lighters) per year. The rule is expected to reduce this cost by 75 to 84%. Therefore, the expected societal benefit of the rule in terms of reduced fires, deaths, injuries, and property damage is expected to be at least \$1.82 per complying lighter sold.

4. As discussed above, the rule may increase the cost of manufacturing multi-purpose lighters by \$0.48 and may increase the retail prices by as much as \$0.96. Therefore, assuming that sales of multi-purpose lighters remain the same, the net benefit (benefits minus costs) of the rule to consumers is expected to be at least \$0.86 per unit (\$1.82—\$0.96). Based on annual sales of approximately 20 million units per year, the rule would result in an annual net benefit to consumers at least \$17.2 million (20 million × \$0.86) annually.

5. The actual level of benefits observed could be higher if some multi-purpose lighters are stored with the on/off switch in the “on” position. If a significant number of consumers commonly store multi-purpose lighters with the switch on, the effective level of child resistance of multi-purpose lighters currently in use may be lower than indicated by CPSC’s baseline testing. This would increase the effectiveness of the rule and the value of the net benefits.

E. Any means of achieving the objective of the order while minimizing adverse effects on competition or disruption or dislocation of manufacturing and other commercial practices consistent with the public health and safety. 1. The performance requirements of this part 1212 are based on the Commission’s Safety Standard for Cigarette Lighters, 16 CFR part 1210. In developing that standard, the Commission considered the potential effects on competition and business practices of various aspects of the standard, and incorporated some burden-reducing elements into the standard.

2. One possible alternative to this mandatory standard would be for the Commission to rely on voluntary conformance to the requirements of the standard to provide safety to consumers. The expected level of conformance to a voluntary standard is uncertain, however. Although some of the largest firms may market some child-resistant multi-purpose lighters that conform to these requirements, most firms (possibly including some of the largest) probably would not. Even under generous assumptions about the level of voluntary conformance, net benefits to consumers would be substantially lower under this alternative than under the standard. Thus, the Commission finds that reliance on voluntary conformance to the provisions of this part 1212 would not adequately reduce the unreasonable risk associated with multi-purpose lighters.

F. The rule (including its effective date) is reasonably necessary to eliminate or reduce an unreasonable risk of injury. The Commission’s hazard data and regulatory analysis demonstrate that multi-purpose lighters covered by the standard pose an unreasonable risk of death and injury to consumers. The Commission considered a number of alternatives to address this risk, and believes that the standard strikes the most reasonable balance between risk reduction benefits and potential costs. Further, the amount of time before the standard becomes effective (one year after publication of the final rule) will provide manufacturers and importers of most products adequate time to design, produce, and market safer multi-purpose lighters. Thus, the Commission finds that the standard and its effective date are reasonably necessary to reduce the risk of fire-related death and injury associated with young children playing with multi-purpose lighters.

G. The benefits expected from the rule bear a reasonable relationship to its costs. The standard will substantially reduce the number of fire-related deaths, injuries, and property damage associated with young children playing with multi-purpose lighters. The cost of these accidents, which is estimated to be greater than \$48.6 million annually, will also be greatly reduced. The rule is expected to reduce this societal cost by 75–84%, or by greater than \$36.5 million. The estimated annual costs to the public are expected to be less than \$20 million. Therefore, substantial net benefits will accrue to consumers. Thus, the Commission finds that a reasonable relationship exists between the expected benefits and the expected costs of the standard.

H. The rule imposes the least burdensome requirement which prevents or adequately reduces the risk of injury for which the rule is being promulgated. 1. The Commission incorporated a number of features from the cigarette lighter standard, 16 CFR part 1210, in order to minimize the potential burden of the rule on industry and consumers. The Commission

also considered alternatives involving different performance and test requirements and different definitions determining the scope of coverage among products. Alternatives that would be more burdensome to industry would have higher costs to consumers. Less burdensome alternatives would have lowered the risk-reduction benefits to consumers. No alternative has been identified that would result in a higher level of net benefits to consumers.

2. A less stringent acceptance criterion of 80% (rather than the standard's 85%) might slightly reduce costs to industry and consumers. The safety benefits of this alternative, however, would likely be reduced disproportionately to the potential reduction in costs. A higher (90%) acceptance criterion was also considered. This higher performance level may not be commercially or technically feasible for many firms, however. The Commission believes that this more stringent alternative would have substantial adverse effects on manufacturing and competition, and would increase costs disproportionate to benefits. The Commission believes that the requirement that complying multi-purpose lighters not be operable by at least 85% of children in prescribed tests strikes a reasonable balance between improved safety for a substantial majority of young children and other potential fire victims and the potential for adverse competitive effects and manufacturing disruption.

3. The standard becomes effective 12 months after it is issued December 22, 2000. The Commission also considered an effective date of 6 months after the date of issuance of the final rule. Although most multi-purpose lighters sold in the U.S. could probably be made child-resistant within 6 months, the supply of some imported multi-purpose lighters would be disrupted. The 12-month period in the standard would minimize this potential effect, and would allow more time for firms to design, produce, and import complying multi-purpose lighters. The Commission estimates that there would be no significant adverse impact on the overall supply of multi-purpose lighters for the U.S. market. A longer effective date was deemed unsuitable because it would unduly delay the lifesaving benefits of the standard and would penalize firms that have already begun to develop child-resistant multi-purpose lighters.

I. *The promulgation of the rule is in the public interest.* As required by the CPSA and the Regulatory Flexibility Act, the Commission considered the potential benefits and costs of the standard and various alternatives. The standard provides substantial net benefits to society. Although certain alternatives to the final rule were estimated to also have net benefits to consumers, they would decrease the level of safety. Therefore, the Commission finds that the standard is in the public interest.

PART 1213—SAFETY STANDARD FOR ENTRAPMENT HAZARDS IN BUNK BEDS

Sec.

- 1213.1 Scope, application, and effective date.
- 1213.2 Definitions.
- 1213.3 Requirements.
- 1213.4 Test methods.
- 1213.5 Marking and labeling.
- 1213.6 Instructions.
- 1213.7 Findings.

FIGURE 1 TO PART 1213—WEDGE BLOCK FOR TESTS IN § 1213.4(a), (b), AND (c)

FIGURE 2 TO PART 1213—TEST TEMPLATE FOR NECK ENTRAPMENT

FIGURE 3 TO PART 1213—MOTION OF TEST TEMPLATE ARRESTED BY SIMULTANEOUS CONTACT WITH BOTH SIDES OF "A" SECTION AND BOUNDARIES OF OPENING

FIGURE 4 TO PART 1213—NECK PORTION OF "B" SECTION OF TEMPLATE ENTERS COMPLETELY INTO OPENING

APPENDIX TO PART 1213—FINDINGS UNDER THE CONSUMER PRODUCT SAFETY ACT

AUTHORITY: 15 U.S.C. 2056, 2058.

SOURCE: 64 FR 71899, Dec. 22, 1999, unless otherwise noted.

§ 1213.1 Scope, application, and effective date.

(a) *Scope, basis, and purpose.* This part 1213, a consumer product safety standard, prescribes requirements for bunk beds to reduce or eliminate the risk that children will die or be injured from being trapped between the upper bunk and the wall, in openings below guardrails, or in other structures in the bed.

(b) *Application and effective date.* The standard in this part applies to all bunk beds, except those manufactured only for institutional use, that are manufactured in the United States, or imported, on or after June 19, 2000. (Facilities intended for use by children under age 6 are not considered to be institutions.) Bunk beds intended for use by children are subject to the requirements in 16 CFR 1500.18(a)(18) and 16 CFR part 1513, and not to this part 1213. However, those regulations are substantively identical to the requirements in this part 1213.

§ 1213.2 Definitions.

As used in this part 1213:
Bed. See *Bunk bed.*